

THE READER'S DIGEST

of Lasting Interest



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No. 77

SEPTEMBER, NINETEEN TWENTY-EIGHT

The Bookman's Monthly Score

From The Bookman (August, '28)

A list of books most in demand in public libraries, compiled by Frank Parker Stockbridge, life member of the American Library Association, in coöperation with the Public Libraries of America.

GENERAL

1. Mother India	Katherine Mayo	HARCOURT
2. Trader Horn	Alfred Aloysius Horn and Ethelreda Lewis	SIMON
3. Napoleon	Emil Ludwig	LIVERIGHT
4. Disraeli	André Maurois	APPLETON
5. Strange Interlude *	Eugene O'Neill	LIVERIGHT
6. The Royal Road to Romance	Richard Halliburton	BOBBS
7. "We"	Charles Lindbergh	PUTNAM
8. Safari *	Martin Johnson	PUTNAM
9. Skyward *	Richard Byrd	PUTNAM
10. Bismarck	Emil Ludwig	LITTLE
11. My Life *	Isadora Duncan	LIVERIGHT
12. Count Luckner	Lowell Thomas	DOUBLEDAY

FICTION

1. The Bridge of San Luis Rey	Thornton Wilder	A. & C. BONI
2. Wintersmoon	Hugh Walpole	DOUBLEDAY
3. The Green Murder Case *	S. S. Van Dine	SCRIBNER
4. Kitty	Warwick Deeping	KNOPF
5. Jalna	Mazo de la Roche	LITTLE
6. Red Rust	Cornelia James Cannon	LITTLE
7. Death Comes for the Archbishop	Willa Cather	KNOPF
8. Beauty and the Beast *	Kathleen Norris	DOUBLEDAY
9. Sorrell & Son	Warwick Deeping	KNOPF
10. Nevada *	Zane Grey	HARPER
11. Claire Ambler	Booth Tarkington	DOUBLEDAY

* This title did not appear in the Monthly Score in the July issue.

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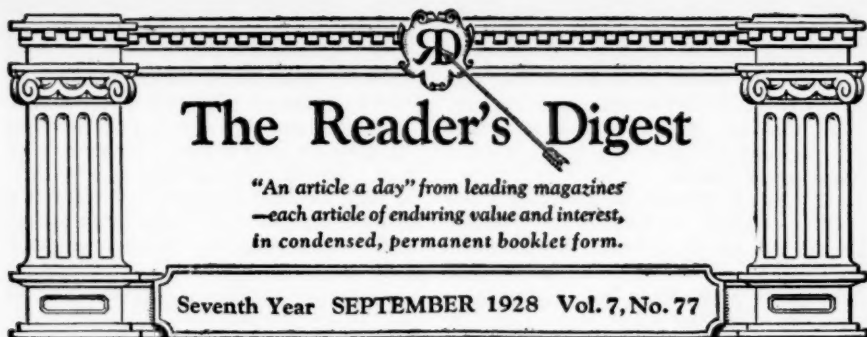
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What Can Happen While You Wink

Condensed from Popular Science (August, '28)

E. E. Free

YEARS ago, when kings were plentiful and apt to be knifed or shot, soldiers used to keep clear a space around each royal person; a kind of safety zone within which no intending assassin could penetrate.

Each human being, whether he knows it or not, goes through life surrounded by just such a neutral zone; a space within which men, automobiles, or other objects may be extremely dangerous, beyond which they are safe. For some people this sphere of safety is narrow, for others it is wide. Its actual width for you is fixed by how long it takes you to think.

For example, tests of 57 typical automobile drivers made by the U. S. Bureau of Standards showed that the average time needed to see a danger signal, realize its meaning, and begin to press the brake lever was a little more than half a second. In this time a car traveling at 40 miles an hour would move 30 feet. That is the minimum width of the driver's zone of safety. But some persons need more time than this; they do not begin to press the brake lever until a full second or even two seconds after the danger signal has appeared. Cars driven by such slowly-reacting indi-

viduals would travel, respectively, 60 feet or 120 feet; not merely before the car could be stopped, but before the driver even began to bring it to a stop!

Since 1921, more than 3,500,000 people have been injured and more than 100,000 killed by automobiles in the United States, while money losses have been more than \$3,000,000,000.

Professor Charles F. Park of the Massachusetts Institute of Technology, expert on automobile traffic, states that the situation is growing worse. Manufacturers are advertising faster cars. People will buy these cars. Average highway speeds are increasing. Sixty-nine percent of the highway accidents in Massachusetts last year, Professor Park computes, were due to speed "too fast for existing conditions and the kind of driver."

Few motorists know, the Massachusetts expert argues, the one most important thing about themselves—that is, the characteristic which psychologists call the "reaction time." It is this that measures the width of the safety zone which you must guard, as soldiers guard the open space around a king.

The menace of slow-thinking drivers on the highways is impossible to com-

pute. No one can say how many thousand lives, how many millions of money, they have cost themselves and others in the last ten years; not because they are careless or incompetent, but because their thinking machinery does not work fast enough to keep up with modern mechanical speeds.

It takes a fraction of a second for a sight to register on the sensitive retina of the eye, or for a sound to affect the mechanism of the ear. Then another fraction of a second is lost in transmitting the sight message or sound message over the proper nerve to the thinking cells of the brain. These thinking cells lose a few more precious second-fractions while they decide what needs to be done; settle, for example, upon the idea that the foot brake of an automobile needs to be pressed. More time is lost while the necessary orders are prepared to go to the muscles that must do the work. All these delays, added together, constitute the reaction time; the time lost in responding to emergency.

If this time is a half second, the driver, running at 40 miles an hour, is highly dangerous to himself and everybody else within 30 feet. If anything shows up suddenly 25 feet in front of him he will hit it. No escape is possible, for he cannot complete his thinking process in time to make the necessary motions. If the speed is 60 miles an hour the needed safety zone is correspondingly wider. If the driver's reaction time is longer, the zone is wider still.

The fastest thing that any man can do is to wink his eye. The instinctive reaction of winking when a cinder blows into the eye is about one-tenth of a second for most people. In that flash of time, an automobile speeding 60 miles an hour will move nearly ten feet. A fast airplane will move more than 25 feet. A golf ball, driven at the wrong angle, can hit a man 15 feet away before he winks.

Many experiments by psychologists on hundreds of thousands of persons

prove that the reaction time for the general population cannot safely be taken as less than one second. This time fixes, therefore, the zones of safety which surround all kinds of machines.

For the average automobile speed of 30 miles an hour the safe distance is 45 feet. For 60 miles an hour it is 90 feet. If your steering mechanism breaks at a 60-mile speed you will have been hurled nearly 90 feet farther before you have time to act.

There are applications of the idea to human movements also. A man walking at a brisk rate of four miles an hour has a safety zone of six feet. If a manhole suddenly opens three feet in front of him he will fall in. The distance is too short to give him time to see the danger and avoid it.

Modern life, with its speeding automobiles, railway trains, airplanes, and with its no less speedy machinery revolving in factories and homes, is pressing close on the abilities of mankind to react quickly and accurately. At the moment the chief danger is the existence of individuals whose reaction times are seriously longer than the average. An immediate improvement in the toll of highway accidents would be accomplished by denying drivers' licenses to such persons; a step already contemplated in some states and actually put into use by a number of business houses in hiring drivers.

The United States lags in providing protection against dangerous drivers. Germany, in contrast, demands a regular course of training in an automobile school, followed by driving practice in a double-control car, and a rigid test directed by a graduate engineer. The procedure of winning a license consumes 18 days, instead of only a few hours.

As speeds increase, no remedy of drive tests or warning signals is likely to be of much use. To quicken the average reaction time of mankind may be possible by evolution in a million years, but is of no present help.



Is Socialism Dead?

Condensed from *The Century* (August, '28)

Will Durant

WATTS labored, and Arkwright, and Whitney, and Fulton, and Stephenson; suddenly inventions began to breed, and life found itself caught up from a million farms and flung into a million factories; every custom crumbled, every relation of man and man, of man and woman, of parent and child, of master and worker, of ruler and ruled; every faith turned into violent unbelief, or faded reticently into doubt, or remained dearer than ever to the lips because dishonored or ignored by life. How could the human mind stand the strain of so profound and complete a transformation?

Industry hurt religion because it nourished the physical sciences beyond the psychological; because it accustomed men to think in terms of cause and effect; because it made them handle impersonal mechanisms rather than growing life; because it gathered them into cities, where every faith lost edge by rubbing elbows with a hundred hostile creeds; because it increased the prosperity of men and enabled them to enjoy the earth too well to lose themselves in hopes of heaven.

Then hope, cheated of heaven, came down to earth, and socialism was born.

The wild rank growth of industry had brought new forms of misery to the working-man. To tend machines that raced faster and faster with every year; to stand in the dark and filth of factories for 12 or 14 hours a day; or, worse, to see himself unused, while this giant slavery opened its arm to receive his wife and children; to find the old trades and skill made worthless by the iron rivals that grew up on every

side about him: it was too much to bear; one must see a way out of it, one must believe it would come to an end; or one would have to bury one's self in the nearest stream, and seek justice or forgetfulness in death.

But, even so, wealth was increasing. It made for misery only because it was gathered greedily into a few men's hands; let these harsh manufacturers surrender to the worker the unnecessary profit made from his toil, and wealth would spread evenly over the surface of the land—vitalize and nourish us all, as Bacon dreamed. Or let the state, in its new omnipotence, become the great father and employer of all men.

So the new religion grew, and had its Bible, its prophets, its martyrs and its saints. The wave of rebellion almost inundated Europe, and for a time in 1848 overalls sat with swallowtails in the government of France. One revolution left 10,000 Communards slain in the streets of Paris. What a battle it was, that 19th century—the cleavage between owner and toiler growing always deeper, the workers multiplying and suffering, thinking and organizing, fighting and losing, fighting from 1789, through 1848, and 1871, and 1905, until in 1917 their long-awaited hour came.

At last, when Lenin sat in the palace of the Czars, after so many trials and defeats, socialism had come! Here was the modern state, powerful with great armies and meteoric geniuses; it would take over railroads, and mills, and ships, and factories, and trade. It would put an end to the exploitation of man by man, of woman by man, of children by man or woman; it would

give to each worker an equal share, or at the very least an equitable share, of the goods in this new and better world; it would be a just and loving father, in whose family there could never be poverty any more.

From that peak of passion and belief how have the mighty fallen! In Russia the leaders who made the Revolution are replaced by "practical men" who feel compelled to abandon the dreams of communism one by one. It is the fate of revolutions to create, by radical legislation, a new conservative class; by distributing the land of a few feudal lords among a million families it widens the hold of greed upon the soul, and decrees the domination of the proprietary impulse in the life of the nation for centuries to come. So it was after 1789; so it must be after 1917. The proletarian revolution will have as its sole result the transformation of 20th century Russia into a gigantic 19th century France; the *mujiks* will force an individualistic economy upon a socialistic government. By 1930 the peasant demand for the divine right to sell not to the state but to the highest bidder, and to buy not from the state but from the lowest bidder, will have broken down all resistance before it. Soon thereafter this policy of barter will have developed a new middle class, clever enough, as in America, to squeeze into their treasuries the flow of goods from producer to consumer.

In Germany similarly, the socialists made the revolution, and the bourgeoisie inherits it. In France the cautious peasant offers to the middle classes the support which enables them to master the impotent wage-earners of the towns. In Italy the workers played at revolution for a time, and found that something more than mere possession was needed to run industry; chastened with a humiliating disillusionment they have surrendered completely. In England the workers were so well-organized that for a moment they thought of seizing power; then the terrible responsibility of taking the

intricate processes of industry from the hands of economic law daunted the statisticians of the proletariat, and led to an abdication which has left the British employer more powerful than at any time since the coming of the factory.

And in America, where are the radicals of yesteryear? Some of them have abandoned their hopes because the Russian Revolution seems a profound failure. Some socialists, some communists, even some liberals have grown rich; and the apathy of the age does not replace them with pious recruits. It is difficult to remain radical when one becomes a partner in the firm, or builds a sweat-shop of his own, or finds royalties raining down upon him. It is difficult to remain radical for a country to be radical when every class in it is prosperous (except the farmers, who are conservative because they fear that radicalism will take from them their land); when almost every family is rich enough to afford the nuisance of owning a home; and when automobiles are so common that the rich must return to horses or legs as a form of distinctive snobbery. It is, above all, this shameless and unparalleled prosperity that has killed or wounded the cock-robin that used to chant the songs of revolution.

There are some other radicals who arrived at disillusionment not through wealth but through a decreasing certainty in their knowledge. They have come (as the wage-workers long since came) to doubt the adequacy of the proletariat to cope with the complexities and inter-relations of industry. They have come to fear the precariousness, and to question the ultimate value, of violent social change; they have realized the almost ineradicable rootage of the acquisitive impulse in mankind. If we can analyze the transformation which has come upon their ideas we may find them of some help in our efforts to understand the meaning and possibilities of human life.

(To be continued)

The Political Equivalent of War

Condensed from *The Atlantic Monthly* (August, '28)

Walter Lippmann

AMONG those who take an interest in the effort to abolish war, there are several distinct types of thought. There are those who believe that in order to abolish war it is necessary to eliminate the causes of the disputes which lead to war. They believe that these causes are invariably economic, and that all wars are really wars about property. They argue, therefore, that there can be no radical cure for war until something is done about property. This analysis is plausible, but I believe it to be faulty and inconsequential. For by taking such a stand you commit yourself to the theory that you cannot abolish war until, by abolishing the causes of dispute, you have abolished disputes. And that, it seems to me, is as fallacious as it is depressing. Any real program of peace must rest on the premise that there will always be causes of dispute, that these disputes have to be decided, and that a way of deciding them must be found.

At the opposite pole are those who base their hopes on a regeneration of the human heart by religious conversion, education, or even by mere propaganda. Among these must be counted Secretary Kellogg, with his treaty to "renounce" war for its "tremendous moral effect." There is undeniable truth in this view of the question. Plainly, unless mankind learns better habits it will not keep the faith on which all pacific arrangements ultimately depend. But, having admitted the desirability of changing the human heart, where are we? We are in the same old position we have been in for two thousand years, in which our religious ideals and our actual practices are hopelessly at odds.

I do not mean to suggest that it is useless to keep on saying that war is a horrible crime, and that it ought to be outlawed. But to keep on saying it will not abolish war. For it does not apply to the situation out of which wars arise. No nation thinks it is committing a crime when it goes to war. Invariably in modern times a nation goes to war to stop another nation from committing the crime of war. As the Austrians saw it in 1914, they did not make war on Serbia. They believed they were acting to prevent Serbia, backed by Russia, from making a criminal attempt to destroy the Austrian empire. The Germans did not make war upon Russia. They made war to prevent Russia from making war. The French did not make war. They defended themselves. The British did not make war. They stopped an aggression. We did not make war. We tried to make the world safe for democracy.

The mere denunciation of war as a crime is no deterrent if it appears that the other fellow is about to commit the crime. It merely makes war the fiercer, because it can be said that the enemy is committing a crime and is an outlaw. The late war demonstrated what excellent propaganda can be made out of the ordinary pacifist teaching.

To dwell exclusively upon the horrors of war, and to assume that it is nothing but criminal madness, does not, I believe, advance the cause of peace. It obscures the true nature of war. For the purposes of thought it is far more useful to dwell upon the function of war than upon its horrors.

The best introduction to an understanding of the inwardness of war is to

think about a particular kind of war which the more advanced nations have made some progress in abolishing. I mean civil war. In the United States this kind of war has now been abolished a little over 60 years. In France it has been abolished for a little less than 60 years. In China and Nicaragua a war is still being waged. In England civil war has been abolished for 200 years.

Now if you ask yourself what is the essential difference between the political life of Nicaragua and of England, you must agree that one of the essential differences is that England has learned to change its social order by the ballot, whereas in Nicaragua political changes are effected with bullets. The transition from revolution to electioneering is the most radical change which can take place in the political habits of a people, and, broadly speaking, the abolition of civil war depends upon making this transition. It took England several hundred years to make this transition, and it was not till the 18th century that "men whose only offense was to run counter to a majority lost their offices but not their heads."

In Nicaragua we see the problem before a solution has been found. Such countries have not learned to use their electoral machinery to change their governments, and revolution is the only method of altering the régime in power.

This is the difficulty which now exists in the relations between sovereign states. At any particular moment there exists a certain international régime composed of empires and nations. In the nature of things this international order cannot satisfy the needs or aspirations of all the peoples within it. Therefore, at a thousand different points there are conflicts. But in the relations of sovereign states there exists no recognized pacific method by which the status quo can be altered.

International society possesses no political method, analogous to party government in domestic affairs, for altering the existing régime. On the contrary, such international machinery as the

world has managed to set up is based almost entirely on the premise that the status quo must be maintained as long as its beneficiaries desire to maintain it. The presumption is altogether against the nation which challenges this existing order and insists upon a change of status. If this challenge is made by a subject people, it is known as "rebellion," if it is the action of an independent state it is called "aggression."

Obviously not all rebellion and not all aggression are good. But neither are they necessarily evil. The important consideration here is that international society provides no legitimate method of determining whether they are good or bad. They are outlawed. And that is why, as in England 200 years ago and in Nicaragua today, important changes in international society are almost invariably accompanied by disorder.

A statesmanlike movement to abolish war must seek at once to strengthen the unity of the Powers in defense of the status quo, and at the same time to enlighten that defense by persuading the Powers that the true defense of their interests may mean, not resistance to all change, but a hospitable guidance of changes that sooner or later are inevitable.

I cannot take seriously any project of peace which does not rest on the premise that order in international society depends upon the development of an international government. I can sympathize with those who prefer the liberty of our present international anarchy to a stable international order which would be oppressive and unpleasant in many ways. If we prefer to retain our freedom, let us at least not deceive ourselves with the notion that we are in any fundamental sense working to abolish war. For war will not be abolished between the nations until its political equivalent has been created, until there is an international government strong enough to preserve order, and wise enough to welcome changes in that order.

That, and nothing else, is what international peace will cost.

Feedpipes for Skyscrapers

Condensed from the Review of Reviews (August, '28)

Ernest K. Lindley

NEW YORK'S subways, which carry every two weeks the equivalent of the entire population of this country, are an integral though invisible part of the skyline of lower Manhattan. They are the conduits through which humanity flows in and out of the skyscrapers. Without rapid transit the skyscrapers would become so many empty standpipes. Every morning the workers pour in great streams through the ducts below ground, and push up into the offices and factories of lower Manhattan. In one building bounded by streets of alley width, 12,000 persons work, and through its doors 50,000 persons pass daily. At night the stopcocks are opened, and humanity, flowing down and out through the same ducts, spreads itself to homes in the outlying parts of the city.

The total trackage of the rapid-transit systems is 625 miles. But even these extensive facilities leave an appalling condition. Ten-car trains, running at intervals of a few seconds, are wholly unable to cope with the rush-hour mobs. A recent investigation disclosed that in one type of car, having 44 seats and 56 straps, as many as 252 passengers have been carried.

The only consolation New Yorkers have is that the city is at present making a titanic effort to offer relief by doubling its mileage of underground route in one operation. It is the most costly, the most extensive, and, in many ways, the most difficult engineering project ever undertaken.

Its cost, approximately \$700,000,000, will be double that of the Panama Canal. To a dozen miles of tunnels, partly through rock, a ditch several miles longer

than the Panama Canal must be added for the new system. The ditch becomes a broad slot, steel and concrete. The extreme difficulty lies largely in the fact that the system must be built without disrupting the traffic of the street surfaces or the vast complexity of gas and water mains, telephone, power, electric light, and telegraph cables buried in the substratum.

Day and night, more than 12,000 men using modern devices are at work. In so far as possible, the subways are built directly beneath the surface of the streets, but open gashes cannot be permitted. The subway diggers must keep a roof over their heads as they move, replace the pavement with wooden planking on stilts without interfering with the life above.

Through the heart of the city they must exercise the delicate touch of archaeologists, in spite of the colossal proportions of their task. Gas and water lines are shot up above the street on trestles, or moved to one side. Millions of feet of wire must be tied up under the temporary roof. In places, skyscrapers must be underpinned, and the existing subway lines propped up on steel framework while the new lines burrow beneath.

When this preliminary work has been done, the main job of digging begins. If one peers through an aperture in the dock of wood, one can see, below a surface clogged with street-cars and automobiles, a lower world of trucks, shovels, cranes, and construction railroads. The similarity to a mine is striking in some of the tunneled sections. You dodge around the corner from a busy thoroughfare, and are lowered 80 feet or so down a

shaft to dripping underground passages which seem as far from the city as the copper mines of Butte.

The new subway system was begun in March, 1925. Along the main Manhattan line, which is nearly completed, the builders have accomplished a variety of interesting feats. Under Washington Heights, at the northwest extremity of Manhattan, the tunnel has been bored through rock, in places 160 feet below the surface. Here, of course, passengers will rise and descend in elevators.

Further south, the subway had to be cut through the bases of the heaviest and tallest elevated structure in the city. The 50-foot columns were picked up, supported on temporary steel frameworks, and reset on the roof of the subway without the slightest dislocation. Special steel was used here.

At the southwest corner of Central Park, Columbus Monument, which stands in the center of Columbus Circle, had to be trussed up for the second time in its history to permit a subway to be run under it. It is 75 feet high and weighs 724 tons. At this point the new subway dives over the old, running down Broadway, and plunges down the broad expanse of Eighth Avenue.

Besides continually blasting and digging among the mazes of communication and supply lines, the subway diggers have twice had to blast up against the four-foot main water conduits for the west side of Manhattan. The mere thought of it brought the field engineers to the verge of prostration, but it had to be done. For more than two years an emergency cut-off for the water system at this point has been manned 24 hours a day, but thus far it has never had to be used.

At several points the new subway is being made the occasion to widen streets. In the financial district the solid phalanxes of skyscrapers make this process impracticable. It is here that the city has just begun what is probably its most ticklish bit of subway construction: the Nassau-Broad Street link. This goes down a tortuous canyon, cross-

ing Wall Street at right angles and grazing the foundations of many of the world's largest buildings.

The way is so narrow that even though only two tracks instead of the usual four are to be laid, they must be placed one above the other. Less than a mile in length, this section will cost \$10,500,000 for construction alone. In order that there may be the least possible interference with business, the work is being done entirely at night and over week-ends. The contracts stipulate that the street must be completely relaid, and equipment must be cleared away by eight o'clock in the morning.

Buildings of enormous weight have been underpinned and shored up. Nassau Street has soft foundations, and many of the older buildings rest upon displaced material through which the subway must be slashed. Almost within arm's reach of the workers—but protected by impregnable walls—lie the vaults of J. P. Morgan & Co., the Federal Reserve Bank, the Stock Exchange, and a dozen other institutions.

When the new subways are opened, early in 1931, the strap-hanger will presumably have a little more breathing space. But for how long is another matter. A new subway line immediately produces more skyscrapers, which, in turn, crowd the subways. It is estimated that enough large buildings are already under construction, or planned along Eighth Avenue, to jam the main trunk of the new subway within a few years. One of the buildings is to be a 110-story affair, covering most of a block. Probably even this is not the end.

Putting in subways at a cost of \$10,-000,000 a mile is a staggering burden, even for a city of the wealth of New York. Whether the subway lines are made to pay for themselves, or, as they are at present, subsidized by the city to preserve a five-cent fare, they are an enormous financial penalty for the massive skyline of lower Manhattan, as well as a severe tax upon the health and good humor of the world's largest city.

Prosperity Without Profit

Condensed from Harper's Magazine (June, '28)

Jesse Rainsford Sprague

IT is remarkable how the fetish of greater volume of business has spread in America during the past few years. In Europe an enterprise that holds its own from year to year is considered healthy. With us there is the well-established theory that a business should show an annual increase.

I offer this shocking explanation: American business men are more influenced by vanity. An economist recently stated that vanity has dictated the erection of a large proportion of city skyscrapers. Frequently skyscrapers do not pay savings-bank interest, yet "men who have made fortunes fast put up the tallest skyscrapers as monuments to themselves and their fortunes."

A prominent New York banker recently showed me the financial statements of three manufacturing corporations. None of the corporations had earned an appreciable profit during the preceding year. The largest, doing a business of three millions of dollars, earned precisely \$961. The banker explained: Up to two years ago the corporations, all manufacturing similar lines, paid reasonable dividends. At that time a vain man became the president of one of the corporations and he proceeded to demonstrate his salesmanship powers. He arbitrarily decreed that the volume of business should increase one-third. To that end branch offices were established in various cities where stocks of goods were maintained for quick delivery. The sales force was doubled, and each was required to sell a certain volume under penalty of losing his position. Longer credit terms were extended to merchants. In communities where merchants bought too spar-

ingly, competitors were set up in business and financed by the corporation.

Sales during one year actually increased from two million dollars to three millions, and to that extent the ambitious president's vanity was satisfied. But the cost of gaining the extra million was so great that practically all profits were eliminated.

Yet that was not all. The corporation's two competitors were also obliged to speed up their selling efforts in similar ways, in order to protect themselves. Their profits were likewise dissipated. Three important corporations failed to pay dividends because one man wished to appear before the world as a two-fisted, up-and-coming apostle of efficiency.

In many lines competition has become so hectic that ordinary salesmanship no longer suffices. Executives drive toward coveted goals of volume by systematic prodding of the vanity instinct in their employees. For this purpose the "sales contest" is employed. Its object is to create in employees a fighting, he-man, bring-home-the-bacon spirit. The National Cash Register Co., for example, promotes a contest each month among its 2500 salesmen. On one recent occasion this event was an "airplane race"; and in the Company's magazine photographs of star salesmen were shown, attired in flying costumes and standing beside their machines ready to burst into flight. At another time the contest was an "automobile race." This message was sent to every salesman, "Make your plans over the week-end. Then hit Monday morning with a bang that will jar the points loose in your territory as they have never been before."

The C & D Co., with 2500 salespeople who sell dresses and underwear, also prods the vanity of its employes by almost continuous contests. A recent event was the hunt of the "Whiffenpoof," a mythical creature described as "anything that keeps a salesman from getting an order." The sales-manager, who called himself "Ram" Rod, divided his hunting force into three camps named Teddy Roosevelt, Buffalo Bill, and Davy Crockett. Each time a salesperson took a \$5 order he was credited with the death of one Whiffenpoof. Prizes were offered for the greatest number of kills.

A number of business concerns have been organized to create novel ideas in the way of sales contests. The Dartnell Co. of Chicago, for example, sells its service to more than 10,000 business organizations. Recently this company devised novelties to be mailed to traveling salesmen. One week the bagman was sent a miniature feather duster bearing a tag that counseled him to "dust his territory." Another week he was sent an imitation cannon firecracker with the injunction, "Make a Big Noise."

The desperate state of salesmanship in retail circles is illustrated by the success story of a prominent department-store owner of Devil's Lake, N.D., in the *Merchants Farm Journal*: "We always had a hard time getting the men into the store in large numbers. So I said to my brother: 'We'll have a summer opening. We'll put bathing suits on living models and we'll send personal invitations to the men!' Well, that is one time we had the men at one of our openings."

Many firms that formerly depended upon their own sales-managers to keep the enthusiasm of their forces at white heat now find it necessary to employ inspirational talent from the outside. An entirely new profession has thus been created, and in the pages of many business journals one finds the advertisements of those who, for lack of a better term, may be called revivalists in salesmanship.

Even in the United States business cannot permanently continue to set up stiff increases without reaching an impasse. An outstanding example is the automobile trade. An unusually high percentage of retail automobile dealers go bankrupt. In the past most dealers have been obliged to accept certain numbers of cars each month from the manufacturers; and often a dealer is tempted to make too high an allowance for the second-hand car his customer wishes to trade in. A saying in the trade is "A buyer doesn't shop for a car any more. He shops for the biggest allowance on his old car." Speaking of this problem, Alfred P. Sloan, president of General Motors, has said: "One of the big troubles of the automobile business is that dealers and manufacturers all have the habit of expecting business every year to be far in excess of that of the previous year."

It is cheering to note that General Motors announces that in the future it will set no arbitrary increases and will adjust its manufacturing to legitimate demand.

Always, just around the corner, is the menace of business depression that invariably follows overselling on a large scale. On this danger an editorial writer recently comments: "The prevailing idea in business that a Company must increase its sales each year is the cause of the senseless scramble for volume that is going on in so many industries. It is also one of the causes of rumors that sometimes start a depression. When a sales organization finds it is falling under its previous high-water mark, it is likely to go into a psychological funk. It communicates its pessimism to others. Orders are cancelled, employes are laid off, and the first thing you know there is a depression, although there is really not the slightest reason for it."

If vanity dictates the policies of business to too great an extent a time may come when Prosperity without Profit will shrink into a condition where there is no prosperity and no profit.

The Dime Museum

Condensed from The North American Review (August, '28)

Don Rose

ONE may read of the amenities of book collecting, and so enjoy vicariously the cultivated delights belonging to a higher financial sphere. One may taste the calculated hospitality of the bookstores, skimming stacked tables discreetly, rapidly enough to escape the necessity of purchase. There are public libraries; there is the magnificence of the British Museum, the Louvre and the Library of Congress. But of all thrills attendant on the seeking, the buying, the borrowing of books, there is one supreme.

That is to buy a good book for ten cents at a second-hand bookstore.

All cities have their share of such bookstores. They also serve, in a world wherein there is no end to the making of books. They are a sort of intellectual repository; wayside inns for books of passage; purgatories of paper and print; Potter's Fields for many books of no importance. In our own city is a second-hand bookstore distinguished above its fellows by a five-tier, fifty-foot shelf devoted to ten-cent books, and flanking the sidewalk with a standing invitation. This is the daily Mecca of many pilgrimages and hopes, and the field for rich gleanings among the unconsidered stubble of the publishing profession.

There are seasons when people seem either to sell more books or buy less. Of a sudden at such crises, either before the blast of inventory or the cold chill of poor business, the store begins to erupt its surplus, and books that have been enjoying false security and fancy prices on inner shelves rapidly descend the social scale. Unable to justify their original rating, they are sold up to pay

for their board and lodge. They drop to fifty cents, to twenty-five cents. Finally they are poured forth on the ten-cent shelf in daily replenishments that keep it overflowing.

Here is the real dime museum of the day. Here is the true democracy of letters, and the melting pot of the brains of men. Here is the last judgment. Here must they find a kindly owner or face a final grave.

These books are venerable, used and worn, as is the wisdom of the world. They are doubtless full of germs, as by now are most of their authors. The great majority of them are overpriced at ten cents, but a greater majority I shall not buy. It is the remnant, the residue, that I seek after, and if I find one pearl a day in so many bivalves, my dime becomes a joyful offering.

A certain conscience must be developed in the buying of ten-cent books, else a library becomes a confusion of tongues. To buy all that are worth the modest price imperils the peace of the home, and books will overflow into cellar and attic. Four cardinal principles prevail. First, to buy no book, however excellent, treating of matters outside the conceivable domain of interest. Here, for instance, is a solid book on dentistry, and again the *Confessions of a Barber*, yet I do not practise auto-dentistry nor cut my own hair. Such books are not for me, and in charity I must remember that others are here to buy ten-cent books to their own liking.

Secondly, no book shall be bought for binding alone. This is a hard rule; it has a harder corollary, that no book shall be bought because it matches others already acquired.

Thirdly, I may buy no book which I may not possibly, conceivably, eventually read. This does not mean that I have read or expect to read all my books; to ask this is to challenge the reasonable expectations of human life. But as I have more ties than I can wear; as I own pipes that I may never smoke again; as flowers grow in my garden that will never be plucked or noted, so my library is to present an opulence of choice, a variety of interest and infinitude of resource. With a thought to this wide basis of eligibility and another to the scarcity of shelf space, I will buy with such discretion as is granted to me.

Fourthly, no book may be forgiven for poor binding or bad print, and scarcely for the lesser shame of unseemly binding. Even this is not incompatible with our appointed price. Witness my five volumes of George Eliot, all dressed in good leather, explaining in their substantiality how they have lived to tell their tale again. Here is a charming copy of *Rasselas*, surely an oversight of the presiding deity of the shelf. Here are five volumes of Dickens containing thirteen of his novels, bound in leather and not in ill repair. Why so cheap? Presumably because the set is incomplete. Yet thirteen tales from Dickens are no mean education.

The aim is to buy good books, well bound and printed, books of genuine interest which I hope or intend to read; and to buy them for ten cents. Occasionally, it is true, I am tempted around the corner and pay as high as twenty-five cents, but no profound principle is violated by somewhat stretching the limit. What fortune, then?

Enough to satisfy imagination and a modest ambition. Thirty cents purchases five inches of Dr. Eliot's five-foot shelf, and compasses all classic English poetry. From these same shelves I have three Shakespeares, and one cannot have too many Shake-

speares. The plays of Euripides, the Poems of Emerson, the *Ingoldsby Legends*, Marcus Aurelius, *Don Quixote*, *Sartor Resartus*, Xenophon on Socrates, Macaulay's *History of England*, Gibbon's *Decline and Fall*, who will grudge for a volume of these the price of a sandwich?

If a man can read he need not die ignorant. Twelve harmonious volumes of science have left the shelf for a better home with me. Ten cents devoted to Disraeli's *Curiosities of Literature* was a happy accident. Odds and ends of poetry and short story have paid generous dividends.

Religious books are here, of course, in an abundance matched only, it seems, by the inexhaustible supply of Owen Meredith's *Lucile*. The state of the Christian world makes its own confession at ten cents a copy.

Indeed, if there be a moral to the ten-cent shelf it is this, that the best and most important memorials to human genius find their way eventually to this plentiful scrapheap. One not too particular as to binding and condition might find here fair representation of every writer of importance to classic English and American literature, history and philosophy. The novels of the day, the transient fads of philosophy or art, the technical treatises of trades, live on the sheltered shelves and name their own price. But in the open air, begging for an owner, herded with the least among books, are the wise thoughts of the ancients, the classics of literature, the fundamental studies of human wit and wisdom, and even the Word of God of both Hebrew and Christian.

Add, then, to the many joys of poverty this privilege,—to spend much time and little money in treasure hunting on the scrapheaps of literature. Call it a waste of time if you will, but since there is time to be wasted, name if you can a better way to waste it.



How I Put Over the Klan

Condensed from Collier's, The National Weekly (July 14, '28)

"Col." William Joseph Simmons tells the story to William G. Shepherd

No one knows the fantastic story of the beginning of the Klan better than "Col." William J. Simmons, the founder. Piece by piece Mr. Shepherd got that story, and found himself in possession of material which no other reporter ever has had. His story is the first real account of the founding of the modern Ku Klux Klan.

A SHAKING old man sat on a platform before the gaze of 30,000 people one summer day in Ohio, five years ago. This great throng had gathered to hear D. C. Stephenson, head of the Knights of the Ku Klux Klan in Indiana and Ohio, hand down to them, in roaring tones, his directions on how to save America from a flock of evils. Stephenson was interesting to look at in his purple robe and high pointed helmet.

But, as the elaborate ceremonies proceeded, the crowd couldn't keep its attention from wandering to the shaking old man in a rocking chair beside the speaker's table. At times the 30,000 would see his head drop forward as if he were sleeping. Now and again he would raise his chin and gaze dully over the acres of human beings. Someone handed the old man a glass of water. Thirty thousand pairs of eyes watched the shaking hand as it raised the glass—and spilled most of the water.

From a pocket the old wreck of a man haltingly drew forth a cigar. Minutes passed before his fumbling, clawlike fingers had succeeded in pulling off the gilded band. He struck a match with difficulty, but he couldn't put the blaze to the end of his cigar. In pity someone on the platform helped the old man to get his cigar lighted.

All through that crowd, that summer afternoon, aides of D. C. Stephenson made their way whispering.

"Too bad about that old man, isn't it? Yes, that's old 'Colonel' Simmons. Drunk as a lord. He came on from Atlanta. We tried to keep him in his private car, but he insisted on coming. Too bad. What a shell of a man!"

No wonder that groans ascended from the assembled Klansmen. The Klan had better save itself first from that "old whited sepulcher" on the platform before it could set about "saving America."

But the old drunken shell of a man on the platform wasn't Simmons. He was a hired actor. Simmons was at his home in distant Atlanta that day and knew nothing of this meeting.

"Steve and Hiram Wesley Evans, who have since torn the Klan to pieces, were only playing one of their tricks that day," Simmons told me recently. "The trick was on me," he added, smiling grimly.

But there he was mistaken. The trick, really, was on 30,000 trusting Americans, unable to defend themselves against lies. Tricks! There's the whole story of the Klan. Back in 1920, when the Klan was new and Simmons was reaching the height of his power, and when Julian Harris had started a fight against it in his newspaper, the Enquirer-Sun, it was impossible to prove this trickery on the part of Klan leaders. But today Harris has won his fight and the Klan is ended in Georgia, with its chicanery exposed.

Seven years later, in Indiana, with one of the most noted organizers of the Klan in a penitentiary for life, this

correspondent was able to discover the trickery of D. C. Stephenson, who, as I shall later show, took some \$3,000,000 away from befooled Americans in Indiana. Here, too, hundreds of thousands of citizens have realized for themselves the once-hidden trickery of Klan leaders.

How did the Klan happen? Nothing but the insanity of war could have produced the Klan. It never could have grown up anywhere on earth but in a nation made up of various races chafing and straining under the emotional stress of war. The Klan was one of the World War's most poisonous weeds.

If Simmons isn't the white-haired old sinner, keeper of a three-woman harem, warming his ancient bones with whisky, as painted by D. C. Stephenson, and by Evans and others, what kind of man is he?

He's a huge hulk of a man. He claims his years number 48. His hair must have been at one time a red flaming shock; now the gray is toning down its flare, and baldness is creeping over the imposing head. He dresses in a preacher's pulpit garb. But this ex-clergyman is worldly, all right. He's city-broke.

"I take a drink. All of us at 'the Palace' used to take a drink," he told me.

"Even when the Klan was fighting bootleggers?" I asked.

"Why, yes, that was a matter for each individual Klan."

Over and over you hear Simmons repeat this phrase, "a matter for each individual Klan." Here's where much of the trickery of the Klan came in. Simmons' Klan, started in the South, was primarily intended to control Negroes. He couldn't think at the outset of all the other prejudices, anti-Catholic, anti-Jewish, anti-foreign, that could be sold in other sections. But Klan leaders everywhere learned to develop new hates and prejudices which they could turn into cash.

Simmons told me he had been planning the Klan for 15 years. "My father was an officer of the old Klan in Alabama back in the 60's. I was al-

ways fascinated by Klan stories. I heard my dad tell them. And I heard the old Negroes tell them. When I was 21 years old I came across an old book about the Klan that started me to studying. I wrote to the librarian of Congress, and he sent me a list of 213 books that had been written about the old Klan.

"I was one of eight children. My father was a physician, but he died while I was still a youth. I wanted to be a doctor, but I couldn't afford a medical education. I went into the ministry instead. When I was 14 years old I was a regular leader of the mid-week prayer meetings in our Methodist church. I went into the army and served in the Spanish-American War when I was 18."

Here is where Simmons got the title "Colonel" which has been such a tremendous aid to him in organizing the Klan. This title, he explains, is an "honorary" one.

When he was 19 years old he was licensed to preach in Alabama, and at the age of 21 was given a charge of several small churches. After some three years of preaching in the "backwoods" he became disappointed in not getting a big city church from the Alabama Conference of 1912. This led him to leave the church and to go into organizing fraternal orders.

"Within two years, I had a little home worth \$3000, all paid for. All my debts had been settled and I was here in Atlanta earning \$15,000 a year as district manager for a national fraternal order.

"My fraternal organizing was going along splendidly when I was put to bed by a motor-car accident. During three months in bed I planned the Klan. I planned the robes and the pointed helmet and the mask. I worked out all the emblems and the ritual. It was while I was in bed that the 'KL' idea struck me—putting those letters in front of every title. I made up our motto too—*Non Silba sed Anthar*—a combination of Latin and Saxon, meaning 'Not for self, but for others'."

Emblems and tokens which "Col." Simmons devised during those days of convalescence were duly copyrighted in his name. The time was to come later on, in days of intrigue, character smashing and downright murder, when he would receive from the Klan a cold \$90,000 in hand for these copyrights.

"This was in the early autumn of 1915. The World War was on, and the Negroes were getting pretty uppity in the South about then. The North was sending down for them to take good jobs. Lots of Southerners were feeling worried about conditions. I went around Atlanta talking to men who belonged to other lodges, about the new Ku Klux Klan. Thirty-four men attended the first Klan meeting on the night of October 26, 1915. Two of them were men who had belonged to the old Klan of the Reconstruction. John W. Bale, speaker of the Georgia legislature, called the meeting to order. I talked for an hour, and we all decided that the idea would grow. We voted to apply for a state charter."

At just about this time the film *The Birth of a Nation* was electrifying America. It was coming to Atlanta for the first time, and its coming undoubtedly hastened Simmons' activities.

"We decided to hold our first swearing-in ceremonies on Thanksgiving evening. I had made up my mind to have everything center around Stone Mountain. We had terrible weather that Thanksgiving Day, but early in the forenoon I drove out there with a real estate agent, and carried up two very resinous pine boards, and some excelsior and wire. At the top I fastened the short board to the long one, and had a cross. The wind was blowing a freezing gale, but we wrapped the excelsior around the cross with the wire before we went down.

"That night, when they all gathered at the Piedmont Hotel, I told the men I was going to administer the oath at midnight on top of Stone Mountain. Some of them wouldn't go, but I had hired a sight-seeing bus, and 15 of the men decided to go.

"The weather was worse than in the

morning. It was pitch dark, and we had to use flashlights. When we had struggled up to the top the wind blew so hard that you couldn't keep your hat on. The boys took off their hats and fastened them down under stones.

"I sent each man out in the darkness to get a boulder. No one knew what I was going to do. Then I held up the cross in the wind while each man placed his stone against the cross. While the men had been gathering the boulders I had secretly soaked the cross with a mixture of kerosene and gasoline. I told the men they had built an altar at the foot of the cross. My father had once given me an old American flag, which had been carried in the Mexican War. I had brought this with me. I laid it across the altar, with a few remarks. Next I placed a Bible on the altar, with some more remarks. Then followed an old sword which had been used in the Civil War. I had been told that, in a skirmish, this sword had been used by a Union soldier in wounding a Confederate soldier, and that in turn a Confederate soldier had picked it up and killed two Union soldiers with it. I told them it had the blood of both sides on its blade.

"Suddenly I struck a match and lighted the cross. Everyone was amazed. And while it burned I administered the oath and talked. We could stay up there only about 15 minutes, because the wind was so high and so cold."

That's "Col." Simmons' story of the first fiery cross. He got the idea, he says, from novels of the old Klan days. After he had burned that cross he dropped his fraternalist job and started to push his own new lodge.

If there had been no David Wark Griffith and no film *The Birth of a Nation*, could Simmons have pushed his new order forward as quickly as he did? Simmons himself says no.

Thanksgiving day fell on November 25th. The "fiery" ceremony on the mountain top was a mystery to the countryside until two days later, but on the evening of November 27th, the news-

papers of Atlanta carried stories of the strange ceremonies and the new Klan. Simmons himself told the reporters the story. Atlanta couldn't be sure whether his story was a press-agent stunt for the film or not.

The film came to Atlanta on December 6th. On that day in an Atlanta newspaper there was an advertisement two columns wide and seven inches deep, inserted by Simmons, announcing his Ku Klux Klan and asking for members. In that same issue of the paper was an advertisement, about the same size of *The Birth of a Nation*.

"Yes," says Simmons, "*The Birth of a Nation* has helped the Klan tremendously."

Later I told David Wark Griffith of Simmons' statement.

"That ends a 13-year-old mystery," said Mr. Griffith. "I've been accused of having made *The Birth of a Nation* as propaganda for the Klan. That accusation seemed foolish to me. My picture was showing about two years before Simmons says his Klan was organized."

With the help of the film Simmons soon had 90 members of Atlanta Klan, No. 1. Each man paid \$10 in cash and \$6.50 for a costume. "A classy order of the highest class," was one of Simmons' first descriptions of the Klan.

Simmons tells you today that "Judases" have always betrayed him. There has always been loose and easy money around Klan headquarters, attractive to "traitors."

"It's a wonder I have any faith left in human nature," he told me. "Someone was always trimming me." You can't talk to this man long without having him try to draw on your sympathy. He feels himself the underdog, a betrayed, set-upon patriot.

There came to Simmons one day, when the Klan was a few weeks old, a long-haired, strange-visaged man who claimed that he was an ex-clergyman and a lodge worker. He gave his name as

Jonathan B. Frost. Simmons took him in (or he took Simmons in), for he spoke well.

"I sent Frost to Birmingham to organize a new Klavern. He stayed there a few weeks, and the new members piled in. Finally I needed some money, and I jumped on the train one day and went down to Birmingham to settle up with Frost, because he had taken in all the Birmingham fees. Well, that was my first disappointment. He had skipped with all the money. He left me heavily in debt. He had gone off to another part of the South and started another Klan of his own."

Frost was caught and the \$800 or so which he had embezzled was recovered, but when Simmons asked his lawyer for it, the lawyer replied, "I've figured it all up, and my fee and expenses absorb it all."

"Things like that were always happening to me. Evans and the other men who worked with me always said I was a visionary and said I wasn't a big business man. I'm a business man all right, but how can a business man deal with concealed crooks?"

"There were times," he tells you, "during those five years, before the public knew of the Klan when I walked the streets with my shoes worn through because I had no money."

"I put over the Klan, at last, but it wasn't all easy going, let me tell you. And after I got it going, with a million dollars' worth of cash and property, they took it away from me. It was something awful."

But before he lost the Klan the World War was to intervene. He was to become for a time one of the most mysterious figures in the United States, a man who turned the American press away from his door and worked in the darkness of which he boasted.

For two years he was to roam in clover, before the end came.

(*Mr. Shepherd's second article on the Klan will appear next month.*)



Farming Under Paper

Condensed from Scientific American (August, '28)

Milton Wright

THE pineapple growers of Hawaii last year paid \$500,000 for paper under which to grow pineapples; 90 percent of the crop is grown under paper. The growers raise 30 percent more pineapples than they otherwise would—and there is a tremendous saving in labor.

But the Hawaiian pineapple crop is only the beginning. Without any stretch of the imagination we can see the day—not so very far off—when nearly all our plants—potatoes, corn, tomatoes, spinach, cotton and what not will be grown under paper.

For four years the Department of Agriculture has been experimenting with it and their comparative tests have demonstrated beyond dispute the value of paper to stimulate plant growth. With every crop save one—peanuts—the experiments were an unqualified success.

The origin of the use of paper in agriculture goes back to a sugar plantation near Honolulu, before the World War. Charles F. Eckart found it a stupendous task to keep down the weeds which sapped the life of his crop. For years he had been heaping crop refuse between the rows—mulching is the term farmers use—for the double purpose of blanketing the weeds and retarding the evaporation of moisture. The objection to this, however, was that the mulch would decompose after a short time, and becoming a part of the soil, would actually encourage the growth of weeds. At last Eckart hit upon a tough kind of paper. He impregnated it with asphalt and laid it on the ground over the fresh cut stalks and seed cane. The sharp roots of the young plants easily stabbed their way

through the mulch of paper, but the weeds were effectively smothered.

The idea grew as other advantages began to be realized. The use of paper meant bigger and earlier crops with less labor. The use of black paper, it was found, raised the temperature of the soil, for the paper absorbed the rays from the sun. Also the soil did not cool so quickly. The activity of bacteria was increased with the rise in the temperature of the covered soil.

Furthermore, the moisture remained in the ground until it was absorbed by the plant roots instead of being wasted quickly by evaporation. Then, too, the paper preserved the original cultivation of the soil throughout the growing period. You tilled the earth once at the beginning of the season and no more, save for turning the earth over from time to time in the rows by machine.

There were many reasons why plants should benefit greatly from the heightened temperature of the soil. Bacteria break down organic compounds and convert them into nitrates and other soluble forms to nourish the plants. These micro-organisms are extremely sensitive to temperature conditions. When the temperature drops below 41 degrees F., they cease to develop nitric acid. At 98 degrees they are at the height of their vigor. At 113 degrees their activity drops back again to what it was at 59 degrees. It is important, therefore, that the soil temperature be right.

Another factor in plant growth stimulated by soil temperature is osmotic pressure. Osmosis is that process by which the moisture is carried from the soil into the roots and through the stems

and leaves; upon it all plant development depends. The higher the temperature the greater the osmotic pressure. Tobacco plants and pumpkins have been known to wilt at night, even when there was abundant moisture in the soil, as soon as the soil-temperature fell much below 55 degrees.

Some soils, of course, absorb much more heat than others, the temperature being largely dependent upon the color. Black soil absorbs the most heat, brown next, red next, yellow next, and gray the least. When mulch paper is used, the heat-absorbing capacity of all the various colored soils tends to be equalized.

One might think that rain would be prevented from reaching the soil under the paper. Actually, the water reaches the soil through the openings where the plantings are made or between the edges of the paper and seeping downwards or sideways, due to gravity and capillary action, is stored up under the blanketing effect of mulch paper.

The Department of Agriculture has experimented with mulch paper in a variety of climates and soils and with a variety of crops. Side by side plantings were made, one set under mulch paper and one set uncovered. With every crop which was tried, save one, the results were phenomenal. Here where the paper was used in the middle of the growing season you would find nothing but splendid, luxuriant growths. There, where there was no paper, you would see the weaker brothers and sisters of those same plants, their growth lagging far behind.

The single exception was peanuts. The explanation lay in the fact that the mulch paper prevented the natural pegging of the plants.

Here are the results from trials with and without mulch paper at the government's experimental farms at Arlington, Va. The percentages show the increased yield of the mulched areas.

	<i>Percent</i>
White potatoes.....	73
Cotton.....	91

Sweet potatoes.....	122
Celery.....	123
Peppers.....	146
Eggplant.....	150
Green beans.....	153
Beets.....	409
Carrots.....	507
Cucumbers.....	512
Sweet corn.....	691

The experiments showed that not only are crops more abundant, but they are earlier. In many cases this affords the possibility of an additional planting before the growing season is ended.

Applying mulch paper to a crop area is simplicity itself. Where drill crops are to be planted a strip of two inches or less is left between successive strips. The paper is anchored to the ground with stones laid on, with staples driven through, or simply with dirt turned over the edges. In Hawaii, where thousands of miles of paper are laid each year, specially designed paper-laying machines are drawn by mules or tractors. With a single operation such a machine prepares the bed, lays the paper and covers the edges.

Planting is done by either of two methods—through the paper or between strips of paper. Where you have such crops as tomatoes, eggplant, peppers, pineapples or field corn which require rather wide intervals, the best way is to plant in regularly spaced openings made through the paper.

Already, as a result of the success in Hawaii, extensive trials are being made with various crops in Africa, Australia, Asia, the West Indies and Europe, as well as in the United States. The reports of all of them strongly suggest that the practice may become a general one.

Think what it may mean! No more drought-born famines. No more barren acres. No more ceaseless toil to kill weeds, robbing plants of their food. Freedom from fear, freedom from drudgery! At last the man with the hoe may throw away the symbol of his serfdom!

Saving the Sunday School

Condensed from *The Forum* (August, '28)

Roland G. E. Ullman

WHEN I was a boy my parents did not force me to go to Sunday School. I did not become addicted to the habit of regular attendance, but I did go as often as I could stand it. Every few weeks I'd go with some crony to the Sunday School which he attended, almost invariably from compulsion and in a state of mind from which reverence seemed to have been almost entirely expunged. It seemed the normal attitude to despise Sunday School and go with a determination to retaliate for the uninteresting program. The boys brought sling-shots, stuck pins into each other, scuffled, and generally contributed to the troubles of the teacher, while the girls resorted to giggling, whispering, and diversified forms of inattention.

Perhaps it was this situation which whetted my curiosity to see if the questions of faith had to be handled in a way repugnant to the youthful mind. And I made up my mind that if ever I undertook to teach a Sunday School class, I was going to make it interesting regardless of how unconventional my method or my choice of topics.

Eventually I did have a class—seven alert, lively boys, “the most unruly class in the school.” The first Sunday one boy tried my sense of discipline and the class knew my attitude at once. Then I set myself to the task of making the class work just as interesting as was in my power. To find subjects that would appeal to the boys I had harked back in memory to my own pursuits at their age, and made a list of about 20 topics. The Bible was never a direct subject in this list, because I think boys of ten and eleven are too young to get much benefit from direct study of the Bible, and it is

exceedingly easy to give them an overdose and create an enduring apathy to it.

Approving of my suggestion, the class organized itself on a parliamentary basis, electing a president, secretary, and treasurer to serve for a term of three months. The president runs the class, calls it to order and asks the secretary to read the minutes, which then stand approved or are corrected. Then the treasurer reports his collection and the purpose for which the funds are to be used. Then old business and new business.

It is only at this point that I enter the picture. I present the “new business,” which is the topic for the day. Very frequently I enter into “old business” also, because our discussions have a way of lasting over, occasionally for weeks.

Parliamentary procedure brought order with it. The president recognizes each eager, would-be speaker in turn, who then has the floor, addresses the group standing, and gets excellent practice in thinking on his feet. The day the first treasurer made his initial round, one boy shook his head. The treasurer thrust an expectant palm an inch from his nose and demanded: “Come across. I know your mother gives you a dime for Sunday School every week.” Boys can say such things to each other.

My first topic was rocks. I came to class with a pocketful of specimens. I laid one on the table. “What kind of stone is this?” and a chorus of voices replied, “Granite.” That was correct, but no one knew how it had been made; so I told about igneous rocks, produced by fire, and sedimentary rocks, resulting from deposits of silt and sand. I had specimens of lava, porphyry, basalt,

metallic ores, and other igneous rock. The following Sunday, after assembly exercises, I led the boys out of the building to my car and took them to a granite quarry, then to a porphyry dyke, and on to an abandoned asbestos mine. We were gone two and a half hours.

I like to open "new business" with a question. It invites the kind of discussion which draws in everybody. "Where did life begin?" was one of my early questions, and we looked at chalk dust under the microscope and saw the minute shells which became the chalk cliffs of Dover. "What are we made of?" was another question, and we looked at a lump of coal, a lump of lime, a piece of iron, a stick of phosphorus, and so on. Was it fascinating? Did the boys like it?

Then, almost at the end of the season, I brought together these widely different topics into the final mosaic. The pieces fitted into a well-defined pattern, broadly pictured and without detail. That week I gave a carefully prepared talk, the only one of the whole term, on "The Marvel of It All." I felt humble and reverent; I could sense the Power which moves us to religious expression. The boys felt it too. We had an unvoiced but moving kinship as we gazed at my sketchy picture of the Maker's cosmos.

The first Sunday in October came around. My little room was jammed. My little class of seven had grown to 30. What was to be done? The class was too big. It was divided into three groups and two friends agreed to share the divided burden. So began the second year.

I began to turn the program of my group toward human service, morals, and ethics. "What four inventions have made the greatest contribution to the welfare of man?" was one of the early questions. The debate was vigorous. Unanimously the alphabet and the printing press were placed in the lead. A majority opinion added fire making and paper making to complete

the four. And these were the opinions of 11-year-old boys! The question which probably proved the most lasting source of discussion and which was "old business" again and again for fully two years was: "Is it ever right to do wrong?" and "Is it ever wrong to do right?" This led to the questions: "What are right and wrong? Are they the same today as they were 100 years ago; 1900 years ago?" Again the discussion lasted for weeks, during which the moral standards of biblical days were seen for the first time in their proper perspective. Some of the biblical "heroes" had an improved standing thereafter, seen as human characters which were a measure of the civilization of their time.

One of the other teachers brought in a problem which all three classes discussed. He gave his boys a railroad ticket which a conductor had failed to collect on a crowded train, redeemable for \$3.24. The boys could do with it what they wished. It would bring enough money for ice cream for every boy. Some were for returning it with an explanation; some for cashing it; some for tearing it up. The last course was chosen because, as one boy pointed out, returning the ticket with an explanation might bring the conductor an undeserved reprimand; also, as the railroad had the money, and the passenger had the ride, the transaction was complete. Intensely practical ethics!

Today the ages of my boys average 13. Our topics have kept step with their development. This year the question, "What benefit do we derive from religion?" was answered, "Contentment and peace of mind." "Does it matter what we believe?"—a query designed to throw the spotlight on religious tolerance—brought much lively discussion which, after due allowance for a boy's language, might be restated by quoting Henry Van Dyke's *The Story of the Other Wise Man*:

Who seeks for Heaven alone to save his soul
May keep the path, but will not reach the goal;
While he who walks in love may wander far,
Yet God will bring him where the blessed are.

Group Practice in Medicine

Condensed from Harper's Magazine (July, '28)

Joseph Collins, M. D.

ONE hesitates to say again that only the rich and the poor get proper medical service. Like all popular sayings, it contains an exaggeration. It is only a portion of the poor who receive appropriate treatment, those who are intelligent enough to go to clinics; and the rich choose their physicians so often for their bedside manner that they frequently get second-class service. Yet it is true that the man who is neither rich nor poor is often denied the medical service to which he is entitled because he cannot afford it. The trouble is not that the physician exacts a fee beyond the patient's means, but that the patient must go to so many physicians before he can find out what is the matter with him, and then to so many more to get cured.

This is not because modern medicine is ignorant; it is because a single individual can know so little of what medicine has learned. The "good old family physician" would be as much out of place to-day as the two-wheel gig that he used to ride in. One of the greatest glories of modern medicine is that it has taken its practice from the realm of guesswork to the realm of certainty. We have not traveled the whole road yet, but we are well under way, and we can hasten our arrival by rational organization which will enable us to do team work expeditiously and efficiently and thus serve the patient better than any individual possibly could.

As an illustration of what organization would do for the patient, let us take the case of a man who consults me as I write these lines. His complaint is dizziness and disturbed equilibrium, followed by nausea and vomiting,

occurring at irregular intervals. I know that this association of symptoms is frequently due to encroachments upon the contents of the small semi-circular canals which are carefully packed away in one of the most protected portions of the skull and whose function is to maintain body equilibrium. I hear his story and make what is known as a physical examination, which reveals that a constant accompaniment of the disease which his symptoms seem to indicate—namely one-sided deafness—is lacking. Moreover, he tells me that there seems to be a relationship between the condition of his digestion and the occurrence of attacks. I note also that his face is lacking in symmetry, one side being distinctly larger than the other.

I think I know the nature and seat of the lesion that is causing his symptoms, but before I am justified in sharing that knowledge with him and advising him to submit to the only treatment that holds out a prospect of relief, I have to get the report of a physician competent not only to examine the hearing apparatus but to make a test which requires much skill and elaborate equipment. I must also have an X-ray of his head, and if this is to be of any value, it must be done by a man who is expert in making plates and interpreting them. I must likewise have chemical and microscopic examinations of his blood and spinal fluid and complete analysis of the gastro-intestinal tract and its contents. In other words, this patient must spend two to three hundred dollars and perhaps much more before he can find out what he should do, and all because I am incompetent to make

the necessary examinations. Why do I thus parade my limitations? Because they are shared with me by every member of the medical profession, and because I am convinced that we can surmount them.

When that man seeks medical advice, this is what should happen: He should go to the medical firm of Smith, Jones, Brown, and Levy. Here he would be received by a discerning, affable person who would seek enough information about his symptoms to lead him to the appropriate hopper of the medical mill. Before he is taken there it should be ascertained whether he is a wage-earner or a wage-payer. If he is a wage-earner, the firm should then and there collect the equivalent of one week's salary. If he is a wage-payer, one hundred dollars should be collected with similar dispatch, and he should be told that he may anticipate supplementary charges should his case require extensive investigation. Then the patient should be given an appointment with a member of the firm in whose province the symptoms would seem to be, who would examine and pass him on to as many others as are necessary to get a complete report.

When it has been decided what treatment the patient should follow the person who effects it should have nothing to do or say about what it will cost, nor should he profit by the payment save as it increases the revenue of the firm and thus his percentage of the receipts.

At present the golden apples of medicine are within the reach only of the surgeon and the surgical specialist. Possibly that is a reason why there is an excess of them and a dearth of physicians and therapeutic specialists.

As things are now arranged it happens frequently that the physician who should get the lion's share gets the lamb's. A man seeking relief from headache goes to an eye specialist who, finding certain changes in the optic nerve, makes the diagnosis of brain tumor and sends him to a neurologist who locates the tumor and advises that its removal

be attempted. The ophthalmologist and the neurologist get \$25 each—the surgeon gets \$2500. This situation is an old story, but that is no reason why it should not be changed. Were it done properly, the kind of group-practice I have in mind would do away with fee-splitting. It is unethical for a surgeon to hand a percentage of the fee he gets for an operation to the physician who brought the patient; the worst feature of such fee-splitting is that it precipitates unnecessary operations.

It may be said that group practice is adapted to ambulatory patients, but not to those who are seized suddenly with illness. It should be peculiarly adapted to them. Suppose one has a chill followed by violent vomiting, what would be the procedure? The same firm of physicians should be called on the telephone, and the affable person who answers should be told the symptoms. She will send a diagnostician, a doctor who is specially qualified to foresee danger before it is apparent to the average eye. The man who makes the examination may or may not be the one who will take care of the patient.

There is nothing new about this plan. The most successful medical organization in the world, the Mayo Clinic, is conducted in this way. It is a huge affair now, with scores of physicians and hundreds of assistants, but a few years ago it was a very small group. One of the reasons it has taken on such vast proportions is that the quality of service which it renders is unexcelled.

The training and experience of the physician seem to unfit him for teamwork. It is easy to see that such work deprives him of something which nourishes his vanity and encroaches on his privilege of being a dictator. The chief obstacle to successful group practice is the temperament of the doctor. The more of a "prima donna" he is, the less desirable he will be as a member of the firm. For this reason candidates for medical firms should be caught while still plastic and malleable. Group practice, they will find, will tend to

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The Appalachian Trail

Condensed from *The Mentor* (August, '28)

George H. Dacy

PRINCELY path of Pedestrianism, the great Appalachian Trail, one of the world's longest improved "walkways," when eventually completed will extend from the crown of Mount Washington, the highest point in New England, to the crests of Mount Mitchell, near Asheville, and to Stone Mountain, a dozen miles from Atlanta.

Overland trampers who seek renewed health and refreshed mentality by outings spent along this tortuous trail will walk close to cloudland over a considerable span of the long course. If they are marathon pedestrians and can spare the time they potentially will be able to follow a typical trampers' trail, in part well graded, from the verdant plateau of rock-ribbed Vermont to the highland empire of northern Georgia.

Benton McKaye's scheme of scouting, mapping and building a tramping trail from the Green Mountains of New England to the Great Smokies below Southern Appalachia has been championed with ardor by the leading outing and mountain clubs of New England, New Jersey, New York, Maryland, District of Columbia, Virginia and the Carolinas. The U. S. Forest Service has extended coöperation and has laid out the ever-growing systems of trails in the federal forests along the route so that they can be linked together as components of the far-flung "A. T."—Appalachian Trail.

Romance, adventure and delightful communion with glorious nature are your constant companions on any hiking trip that would take you from one terminal of this wonder walkway to the other. The twang of pioneering perils, the lure of exploring unseen scenery, roughing it in the undeveloped

open country under somewhat similar conditions to those that our hardy forefathers knew so well—these are but a few of the sporting attractions of a jaunt through this hiking paradise.

One inimitable feature of the Appalachian Trail is that it follows the wilderness highlands of the White Mountains, Alleghenies and Appalachian Mountains far from the orthodox thoroughfares of civilization. The Trail leads to many scenic wonders, including the Natural Bridge of Virginia, the wonderful Caverns of Shenandoah, the Delaware Water Gap, and the Blue Ridge skyline.

Tramping from the northern to the southern ends of the Appalachian Trail, an overland hike of 2000 miles, is equivalent to a round-trip journey from Washington to St. Louis. This future mecca of American trampers offers plenty of nature's best medicine for city-tired folks. Thousands of walkers now tramp portions of the Appalachian Trail. The future promises to bring increased popularity for this outdoor sport and to distribute bands of enthusiastic pedestrians along all stretches of the trail. At present the "A. T." is practically completed through New England and New York State except for signposting the pathway with appropriate markers. There are about 500 miles of established trails in the Shenandoah National Forest that are being dovetailed into the Appalachian Trail. Much scouting, survey and construction work remains to be completed in the Appalachian Mountains country before this record thoroughfare for "pedestrians only" is added as a finished feature of America's outdoor life.

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correct some of the physician's deformities such as jealousy, envy, and covetousness. To have one's work "checked up" is a great culture medium for humility.

Group practice will accomplish another thing sadly needed. It will develop doctors who know how to care for sick people—theraputists they are called. We have our share of keen and reliable diagnosticians, but in the field of treatment we do not make such a brilliant display. The number of physicians one encounters in a lifetime who are skilled in the use of water, heat, light, electricity, massage, exercise, and diet, and who know how to utilize the fundamental principles of psychology is astonishingly small.

One of the commonest complaints I hear as I go among physicians is that the osteopath and masseur, the irrigationist and vibrationist, the hydro-path and the naturopath, the new thinker and the old doer are bidding for their patients and in many instances getting them. My colleagues have only themselves to blame.

Osteopaths and chiropractors have an erroneous conception of disease, but their ministrations help nature cure disease. No one who has seen water used to combat disease will deny its potency, and the benefits that result in chronic disease from the proper use of massage, active and passive, and manual and mechanical movement are often enormous. Something good may be said for all the non-therapeutic measures. But the physician must know how to use them, and he must tell the world, not vaingloriously as the quack tells it, but with dignity and assurance, that he knows not only their virtues, but when and how to use them. It is enormously to the credit of Yale University that it is taking steps in this direction. The only way to learn how to use such measures is to try them out on one's self. The therapist of a group should spend one holiday at Marienbad, another at Nauheim, another at Aix, another at Lourdes, and

so on, familiarizing himself with European Spas, and should not forget the potentialities of Saratoga Springs in his own country.

When the group replaces the individual, better medical and surgical service will be within the means of all save the poor, who are cared for now in every self-respecting community. It is difficult now for people out of health to find a "good" doctor. When group practice becomes popular, a man falling sick in a hotel, a new-comer to a community, will not have to rely on the interested drug store or the wily advertiser. The sick man will be able to get the address of a medical group from the telephone central, just as one can now report a fire or call the police; or Medical Societies will provide the information. It would, of course, be testing the truth to say that every group will be competent, for a number of medical crooks or incompetents might organize. But that would simply be another of life's hazards.

It cannot be denied that the chief objection to the group system is that it might minimize the personal relationship of patient and physician. Group physicians will always have to be on their guard against impersonalizing their service. They must remember that a considerable proportion of the physicians' work is not the practice of medicine at all. It consists of counseling, encouraging, sympathizing, understanding. It is not only the malign microbe that the physician has to combat; it is the unclean spirit. The chief reason why physicians are consulted so frequently about matters seemingly beyond their province is that there is a tradition that they are deserving of confidence, and one of the glories of the profession is that its members seem to be deserving of it. One of the hardest tasks of group physicians will be to maintain this high tradition, based as it is upon the personal relation between doctor and patient.

Even so, I believe that the advantages of group practice will heavily outweigh its possible dangers.

Who Is a Criminal—and Why?

Condensed from *The World's Work* (August, '28)

Warden Lewis E. Lawes

RECENTLY I read of a Supreme Court Justice of New York who was quoted as having stated that there were eight physical characteristics that marked the criminal: "receding chin, protruding jaw, wide unwinking stare, droop in the left eyelid, low brow, bumpy brow, thick hair, and ears set at right angles to the head"; and that where as many as four of these characteristics were present in an individual there could be no doubt of the man's criminal nature. A half-dozen well-known men, who have at least five of these eight characteristics, include the president of a leading American university, a great English preacher, a French general, a Russian statesman, a leading Spanish writer, and one of the world's greatest inventors.

The idea of the born criminal, foredoomed to crime by his physical makeup, was elaborated into a theory by Cesare Lombroso, an Italian criminologist. The theory, however, was quickly exploded by Dr. Charles Goring, who showed that as many of Lombroso's physical stigmas are found among non-criminals as among criminals.

It is now known to all leading scientists and criminologists that the "born criminal" type does not exist and never has existed. The myth merely appeals to the public's imagination and has been popularized by fiction, stage, and screen. Show me an American who looks like Uncle Sam and I shall grant the possibility of finding a man who looks like the "typical born criminal."

Officials of large surety companies find from experience that "nine out of ten men are potential criminals" and believe that women are more honest

than men. On the other hand, the heads of department stores say that the majority of people are honest and that nine out of ten thefts are committed by women. Hotel officials say that both men and women guests steal everything that can be carried away.

In other words, the popular criminal theories *do not square with practical facts*. What is the correct angle from which to approach this question of the criminal—who and why? Law determines crime. There would be no crime without law and, by the same token, no criminal. A criminal is, therefore, any one and every one who commits an act forbidden by law or omits an act commanded by law. Any one who steals, be it a 5-ct. apple or a \$50 bill, a watermelon or a car, a handkerchief or a fur coat, has committed a theft and is, in the real sense of the word, a criminal—regardless of whether he or she is ever tried and convicted.

I have discussed this point with hundreds of prominent men, and most of them admitted that they have at one time or another violated laws (committed crimes), which would have resulted in imprisonment if they had been prosecuted. Some even admitted a sufficient number of violations to bring a "life sentence" under the law as it now applies to "fourth offenders." The few who would not admit the commission of a crime conceded that they could imagine conditions under which they might commit a criminal act. The poet Goethe said that he had never heard of a crime that he could not conceive of himself doing under certain circumstances. The born criminal of popular imagination is a *myth*.

All mankind is potentially criminal under certain circumstances. In every community are respectable men whose wealth was secured by essentially criminal means. Many an honored financier has made his success by "blackjacking" competitors and by bribing public officials. Such men of the "upper-world" are as criminal as the "black-jacking" thugs of the underworld. Society succeeds in bringing only a small number of violators before the courts, and only a small percentage of these, the "small fry" are convicted.

"The most daring and desperate, most hardened and cruel, most cunning and remorseless criminals in the world"—this has been said of the criminals of New York city and its environs, from which Sing Sing receives its prisoners. There is little doubt that Sing Sing's prisoners are as bad as there are to be found in any other of the world's prisons. Since I became warden on January 1, 1920, I have handled more than 10,000 of these "bad" men, and have found myself faced with an equal number of paradoxes and anomalies. The gunman-murderer, in most instances, proves to be tender-hearted; the bold robber, timid; the thief, honest.

The warden is required by law to live at the prison and the statute provides that his servants shall be prisoners. The result is that I have had a cook who was a poisoner, and have been shaved by a prisoner who had cut another man's throat. My youngest daughter, now six years of age, has been driven about outside the prison walls in her pony cart by a man doing 25 years for kidnapping.

It is an interesting consideration that a thief in prison is despised by prisoners committed for theft, and that capital punishment is strongly upheld by those who have been sent to prison for murder. How do they square this attitude with their own crime? Simple! Their acts were not crimes to their way of thinking.

A prisoner who had been a bank cashier insisted that what he took really belonged to him, as he had worked long hours overtime and was poorly

paid, anyhow. Another man declared that he hadn't really stolen anything, because he meant to, and would have put it back as soon as the stock on which his employer gave him a tip went up. Several prisoners have contended that they had done no more than is being done by "big business" every day, and that "Stealing is good business when a man succeeds and is larceny only when he fails." An unusually intelligent forger took the position that nobody but the farmer and the miner were really creating wealth, and that all other wealth was acquired by "out-smarting" the other man. He emphasized the fact that he only "worked on" banks or business men who carried insurance, so "nobody lost anything, as the insurance companies got theirs from people who would rather pay premiums than to take ordinary business precautions."

Crime is rarely a one-sided proposition; guilt is rarely a personal thing. Responsibility must, in most instances, be shared by society, which takes credit for a man's virtues and should by the same token acknowledge at least some blame for his vices. The newspapers and movies, by their grossly exaggerated figures in connection with the hauls of robbers, burglars, and forgers, or alluring portrayals of crime, are often responsible for giving the impression that crime pays, when as a matter of fact it does not. I am of the opinion that incalculable harm is done in this way. Almost without exception, convicted criminals are poor men. "The insurance system is responsible for a great deal of crime," says Judge E. O. Lewis of Philadelphia, and readers will recall that the principal incentive in two recent murders in New York was life insurance, a large part of which was procured without the insured man's knowledge.

In the responsibility for crime the schools, the churches, and many thoughtless fathers, indulgent mothers, vain wives, underpaying employers, dishonest politicians, usurious bankers, and grasping money lenders must share.

Amazing New Jobs for X-Rays

Condensed from Popular Science Monthly (August, '28)

Boyd Fisher

X-RAY photography has come out of the laboratory and put on overalls. Almost every day it takes on new jobs. In countless ways the invisible rays are adding to our safety and comfort.

If your friend beats you in golf, maybe the X-ray is helping him! For a perfect drive the center of the golf ball must be absolutely true. So, where the most carefully-made golf balls are manufactured, one man spends all his time looking through the finished balls, to be sure their centers are flawless.

The latest method of remodeling valuable old Colonial mansions includes the use of X-rays. The architect goes from room to room looking through the walls and finding just where joists and pipes are hidden. Thus, haphazard tearing into walls is avoided.

Some years ago, a costly lawsuit arose over the finding of a piece of glass in some candy. Now, one manufacturer protects himself and his customers by passing each box of chocolates down a moving belt before an inspector who, with an X-ray machine, searches their contents for foreign objects.

In another factory, toothbrushes are inspected in a similar way to see that the bristles are properly set. Slate, intended for telephone switchboards, is X-rayed to assure that it is free from streaks of metal. The rays likewise give the final approval to splices in submarine cables.

X-rays also promise larger chickens, bigger and better eggs, and more of them! Dr. William H. Dieffenbach, of the Flower Hospital, in New York City, has just reported amazing experiments in hatching Plymouth Rock eggs. Some

he exposed to X-rays for a few minutes and others for several hours. In those exposed for the shorter period, the usual ratio of males to females among the hatched chicks was completely upset. Almost every chick was an egg-laying female.

When the eggs were exposed for several hours, more surprising things happened. Out of them came chicks, perfectly healthy, but unlike any other chicks on earth! Some had no wings. Other strange changes in form that would require many generations of gradual evolution had taken place in a single generation. Dr. Dieffenbach believes that with X-rays he will be able to produce new species of chickens superior to any. He found that many of the hens hatched from ray-treated eggs attained a weight far above normal, and that they began to lay much sooner than usual.

X-rays have done much to make factories safer for workmen. Here, for example, is a throttle-valve as big as a three-year-old child. It must stand a pressure of nearly 2,000,000 pounds. The slightest hidden flaw means possible death for men who work near by. Since the X-ray will photograph an internal crack no wider than a hair, and will reveal the tiniest cavity, its use has largely eliminated this peril. In many plants, notably the Edison Company's important high power plant at Weymouth, Mass., it is a rule that every casting must be X-rayed before it can be installed.

Many men have been blinded or killed by abrasive wheels that have "exploded" at high speed while grinding tools. All such wheels are now ex-

amed with X-rays and shown to be free from defects before they are used.

One of the latest services of the X-ray is to examine the wood used in airplane construction, assuring that no internal knots or worm-holes will menace the life of a pilot in some hard fight with the elements.

In the Navy, dangers attending practice maneuvers with big guns likewise have been reduced. X-rays have provided the only reliable means of detecting a flawed "nose" in a high explosive projectile, which would endanger the lives of all who might handle it. Big guns also are examined for internal cracks that might cause them to blow up under continued firing.

In the past, a problem often discussed by automobile makers was the amount of oil required to lubricate an engine properly. The question was settled the other day by the use of the X-ray. It showed that a thin film of oil only a few molecules thick is best.

Recent tests have shown that an X-ray photograph is one of the surest and quickest ways to test the quality of a piece of coal. It reveals the relative percentages of combustible material and worthless ash and mineral.

Another promising new field is in photographing the crystal structure of metals. Every metal is distinguished by the geometrical crystal form in which its molecules arrange themselves. X-ray pictures reveal these tiny forms in light and dark lines, and so distinguish one metal from another in an instant.

A "family album" of photographs of metal crystals is being collected by the University of Wisconsin. Soon the collection will include every known mineral of the world—more than 1100 in all.

However, photographing crystals, invisible to the most powerful microscope, is but a step toward more wonderful possibilities. Professor George L. Clark, of the University of Illinois, tells

of taking pictures of bits of matter 10,000 times smaller than anything that can be seen through the most powerful microscope. He prophesies that the X-ray will be able to show us not only the molecules and atoms of which all things are built, but even the tiny suns and planets within the atom!

One of the most staggering stories science has to tell is this story that solids are not solid at all; that the molecules and atoms and electrons that make up rocks and buildings and automobiles are not touching like bricks in a wall, but are far apart, moving in space! When you bang your head on a door in the dark, anyone would have a hard time to convince you that what your head hit was nine-tenths empty space. Yet shortly, according to Professor Clark, you will have pictures that prove it!

In the famous French art gallery, the Louvre, each of the 9000 paintings is being examined under X-rays to determine its authenticity. Some startling surprises have resulted. For instance, one of the paintings was supposed to be the work of the 17th century master, Carlo Dolci. The X-ray revealed that what the public saw was not Dolci's work at all. Under the surface paint, on the original canvas, appeared the real masterpiece! Two centuries before, one of Dolci's canvases had mysteriously disappeared. Someone had painted another picture over it, leaving a few faces and the signature showing. Experts were able to peel off the outer layers of pigment and restore the original picture.

X-rays prove equally valuable in the examination of jewels. Real pearls, for example, glow under X-rays, while imitations are opaque. Even the pearl fishermen rely on this new aid to tell the value of their catch. When a boatload of oysters arrive from the beds, an X-ray expert looks through the shells, one by one, to see if there are pearls inside. If there are, the oyster is opened. If not, it is thrown back into the water.



The Movies Try to Talk

Condensed from *The American Mercury* (August, '28)

Robert F. Sisk

THE "silent art" is in considerable danger of losing its character. From the time the firm of Warner Brothers first consorted with the Vitaphone device for the synchronization of sound with pictures, the moguls of the industry have paid close attention to the new invention, and the major portion of the film business is now determined to make its pictures talk. The Warners have already released three films which do this trick—"Tenderloin," "Glorious Betsy," and "The Lion and the Mouse." In the former there is the shriek of a lady about to be attacked. Her cry is, "No, not that!" The first-night audience in New York tittered, but the magnates are undismayed. Now the rush of talking films is on us, and the revolution is going to remake the movie industry, or ruin it.

The reason why the moguls of the films are thus going hot-foot after talking devices is that they need something to fill the great number of vacant seats in their cinema palaces. Films themselves, it has been proved, no longer draw sufficient numbers. Having built so many new theaters, the great operators have discovered that they can't make films on a factory basis and turn out anything capable of bringing in throngs. Only one firm, the United Artists, produces as few as 15 pictures a year. The Paramount turns out about 75, and believe it or not, some of them aren't so good. The same thing goes for the other big firms, the Metro and the First National. To offset the deficiency in drawing power, the master minds have put great orchestras into their cathedrals. They have been digging up singers, dancers, and jokesters.

Some of the more adventurous, such as Roxy, have put a dozen dancers on one bill, and instead of a singer or two, a whole chorus. All this is based on the accepted movie doctrine that quantity and quality are identical.

It was Will Hayes who made the dedicatory address when the first Vitaphone show was given. Mr. Hayes was optimistic. After predicting that the invention would revolutionize the movie business, he further mentioned that it would be a godsend to the populace, and sat down. Then an assortment of novelties was unreeled. Vaudevillians did their stuff, jazz orchestras played, and opera singers offered the high art moments of the evening. The images of the performers were on the screen, and the sounds apparently came from their mouths. Finally came the feature film, Mr. John Barrymore in "Don Juan," with an orchestra arrangement of the score played¹ along with the film on the Vitaphone.

From this beginning two years ago, the talking film worked up to the point where bits of dialogue were introduced. Al Jolson made his appearance in "The Jazz Singer," singing both "Mammy" and the Kol Nidre, beside conversing with his Ghetto Mamma. Irving Berlin wept at this première and other hard-hearted gentlemen of Broadway admitted that Mr. Jolson was never better. The film coined money. At the time it was released, there were but 400 theaters wired with the talking film apparatus. It went into every one of them and broke record after record. "Tenderloin," which followed it, was subjected to certain hoots and jeers at its première in New York, but in the out-

lying districts did even better than "The Jazz Singer." This success made up the minds of the film men.

Now nearly everybody has announced intentions of making talking films. Paramount will reopen its Long Island studios, and is already making the stage play, "Burlesque," as a talker. The First National is making "Lilac Time." Universal wants to make "Show Boat." The optimists are saying that 1000 of the 19,000 theaters in the country will be wired for talking films by January 1. The apparatus costs from \$4000 to \$20,000 to install.

The first question that pops into a layman's mind is whether the talking films will ever supplant the speaking stage. The better people of the speaking stage think they will not be affected. They argue that their audiences are class audiences, uninterested in the low level of movie entertainment. For it is a foregone conclusion that these talking films will be forced to stick to a low intellectual level—unless their producers wish to alienate great audiences already enrolled under their standards. It would not do to produce "Hamlet" as a talkie and show it five times daily, even though Douglas Fairbanks was the Hamlet and staged a swell wrasslin' match with the Old Man's ghost.

The business of making screen ladies say that they love screen gentlemen involves a delicate point. What chance has the cinema favorite, formerly skilled in mixing chocolate syrup with carbonated water, of speaking lines as an actor should? Such work, obviously, will take skilled performers, and they will have to come from the stage. That is where the players of Broadway will go, since salaries in the films are so fabulous that the stage cannot possibly compete. The stage will have to buckle down to the thankless task of developing new players for itself, and then losing them to the films.

Moreover, when the film producers begin to make talking films they will find the trick hard to turn. The average film director may not be able to do

it. Gentlemen skilled in making battleships ram fruit steamers so that tarantulas may escape and bite admirals on the leg will be faced with the difficulty of maintaining dramatic pace; they will have to fit their scenes so that action is heightened when it should be, so that the rising inflection in the dialogue will continue to rise throughout several scenes, although they be made at different times. This new movie situation will bring out the talent and separate the quick from the dead.

No one will deny that the new device will be enormously effective in many instances. Take a typical Western film. Let the cowboy be petting his horse. As his hand passes over the animal's nose the horse will whinny. Through the theater will go a thousand "ahs." Let the cowboy be in pursuit of desperate villains. The report of his revolver will be a kick, accompanied by the sound of his running horse. Let his horse rear and snort; all of this, too, will be recorded.

In connection with the task of getting good voices for the movies, another commercial problem arises. The industry now receives about 40 percent of its total income from foreign sales. Except for the English-speaking countries, the talking films will be no good. A black-and-white film will, of course, be taken at the same time that the talking film is being recorded, but with the induction of new players to Hollywood to make the talkies, their installation as favorites to succeed the speechless and therefore fallen gods will be costly. For every non-talking favorite omitted, a talking player will have to be substituted, and inasmuch as some of the present stars have built up terrific followings abroad, it will be difficult to get their followers to accept other players suitable for both the black and white and the talking versions.

The First National plans a School of Elocution for its players. But there will be plenty of suffering before the perfected talking film comes along.

Indigenous Simplicity

Condensed from *The Atlantic Monthly* (August, '28)

William F. Jones

IN the casual habits and mental behavior of the peoples indigenous to them, the true understanding of the Latin American countries may be found. Observers often make the mistake of looking for complex psychological processes and oblique explanations in these people. The secret of understanding them rests in simplicity, not complexity. Their ideas, their thoughts, their actions, are childishly simple. Like children they give free vent to their emotions; like children their amusement is generally at the expense of someone else's discomfort; like most children, they are inherently honest, but sometimes put their own trivial gratification foremost at unexpected moments.

In 1922 I had occasion to travel about over the state of Tabasco in Mexico on a river steamer. These steamers have no definite schedule, merely zigzagging back and forth from one town to another. If you happen to be going to any particular place, you need no more than the ability to endure the food. Eventually you will arrive. But a friend of mine, on one occasion, started off on one of these steamers for another town, and on the fourth morning awoke to find the boat docked at the place he started from. During the night the steamer had taken on a load of cattle and changed its plans.

It was my fortune during my own voyage to have a cabin the door key of which had been lost. The Indian cabin boy kept a chair and stick near my cabin door, and each time I wanted to enter he stood on the chair and, reaching through the transom with the stick, dexterously pressed on the catch inside. The replacement of the lost key had never occurred to anyone.

The top deck, where passengers were permitted to walk about, had lost a large section of its railing on one side. It had been removed, so we were informed, along with a number of passengers who had been leaning against it at the time. It had not been replaced, because as long as it was not there people could not lean against it. Its absence was a measure of safety. Very logical! But when the captain was asked why the rest of the rail was not removed to make the deck entirely safe he could not answer.

The man who has not traveled in such a steamer has yet to know the apex of discomfort. Most of the steamers are vessels which have, after years of service, failed to pass the boiler-inspection tests in the United States. I never saw any attempt to clean the ships, inside or out. Table linen is never changed. At meals one sits down before a stack of heavy white plates which have been only imperfectly washed. The inevitable soup is usually a hodgepodge of whole vegetables, containing always several large whole cabbage leaves. But why continue?

I traveled once up the Gulf Coast of Mexico on a boat called the *San Juan*. She is on the bottom now, and should have been then. There were no regulations governing the number of passengers or the amount of freight. This boat had cabins for 16 people, but I was number 84 on a passenger list of 96. The freight not only filled the hold but covered the decks. The main deck was covered to the height of the railings with cases of empty beer bottles being returned to the famous brewery at Orizaba.

A short distance out from Carmen, one of the cylinder heads blew off the engine

with a tremendous rumble, and great clouds of steam poured through the hatch. The ship drifted aimlessly for several hours and no effort was made to effect repairs. An accident had occurred, and beyond this no one, for the time being, seemed able to think. Meanwhile everyone on board became exceedingly friendly and good-natured. Families established camps all over the boat, even building little fires in their charcoal *braseros* and cooking their meals. The noise of conversation, mixed with the crying of numerous infants, became appalling. Groups of men gathered together for serious argument and discussion, accompanied by much gesticulation. One would have judged that they were discussing politics or international affairs, but a visit to several groups which seemed the most serious disclosed the following subjects of debate:

How many eggs does a turtle lay? Are the mangoes raised in Cuba superior to the mangoes raised in Vera Cruz? Has the Spanish language more or fewer words than the English language? Are the roots of mangrove bushes actually roots or are they branches?

On the boat was a man who had a collection of Mexican stamps, and as I happen to be a collector, I asked him if he would sell them. We spent two hours discussing the price. In the discussion nearly every male passenger on the boat participated. In fact it became a matter of personal moment with all of them. Finally, when we had agreed upon a price, the man with the stamps informed me that he could not sell them because they belonged to someone else.

Among the Indian natives I have seen the trait of honesty so often that I have no patience with the prevalent opinion that the native is a thief. One custom that surprises the stranger in the larger Mexican cities is the casual way in which people carry sacks of money about the streets. There being no paper currency, business houses send boys and clerks to and from the banks, unguarded, carrying thousands of pesos.

Perhaps under no conditions are the racial characteristics in Latin America

better displayed than on a railroad journey. Traveling by rail to the Latin American is a picnic. It may be a business trip, but he gives the impression that the ride exists for the pure joy it affords him. He becomes, while traveling, an inveterate eater, as well as an irrepressible conversationalist. He buys food in bulk through the train windows at stations, much of it brilliant in hue; his preference is fruit of all descriptions, very juicy, along with candies and cakes dyed in vivid shades of red, yellow, green and blue. In Mexico the favorite fruit is the papaya, a large yellow melon. In other places it is the pineapple ripened on the bush. Only in Latin America can one see a whole pineapple devoured by a single person.

Before you have been an hour in your train coach you know intimately everyone in the car, and everyone talks to everyone else at the same time. It becomes a bedlam of conversation, in a space in which the air reeks with the odor of food and where the floor is littered with fruit peelings and swimming in fruit juices. Ample time should be allowed for farewells before you reach your station, for you will find yourself called upon to shake hands all around, and let many of them pat you on the back and tell you what a great friend you are.

One day I was sitting with a friend in a sidewalk café in Villa Hermosa when a donkey loaded with sugar-cane stalks came down the street. An Indian with bare feet walked behind. Only the donkey's small feet showed beneath his burden, and his head was similarly submerged in sugar cane. In front of our café he decided to go no farther, and lay down in the street. Then all we could see was a pile of motionless sugar cane. The driver first tried verbal persuasion, and then brutality, prodding the donkey's face violently with a stick. This the donkey resented, so he stood up and began to kick vigorously. As this divested him, piece by piece, of sugar cane, he gradually came into view. Sugar cane scattered in all directions. A gang

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Print and the Man

Condensed from *Vanity Fair* (August, '28)

Aldous Huxley

FOR the shy and retiring the profession of writing has special charms. It enables them to say their say without their coming into any personal contact with the men and women to whom the say is addressed. It permits them to exert an influence on the affairs of the world, an influence which can sometimes be enormous and epoch-making, without ever mingling in its tumult. Sitting remote and misanthropic in his hermitage, Jean-Jacques Rousseau impressed himself on Europe almost as profoundly as Napoleon at the head of his armies. Across the modern world the shadow of the much-whiskered, library-haunting student, Karl Marx, lies dark and gigantic.

This is a state of things which, for my part, I find exceedingly attractive. There is not, it is true, the slightest prospect of my modifying the course of history. Elephants are not brought down with pea-shooters. But peas can be shot, or bombs can be thrown, by the writer, from the fastness of a hermitage. We can delightfully combine the seclusions and privacies of the contemplative man with the man-of-action's participation in the world's affairs.

But, much as I enjoy these privileges of authorship, I can see that they have their dangers. The impersonal author, unknown and invisible to his readers, is spared many of those personal difficulties and criticisms which keep the ordinary man of action healthily in his place. The man who makes personal contacts with his fellows runs the risk of being laughed at, if he is ridiculous; of being knocked down, if he is offensive; of simply being ignored, if he happens

to lack the impressive personality which commands attention and inspires respect. The writer runs no such risks. Behind the impressive façade of print he lives secure and remote.

Now, print enjoys a strange and almost invincible prestige. A man must be an extremely hardened and cynical reader before he can quite ignore that prestige. The great majority of human beings are simple-hearted, trustful folk for whom the printed word still has (in spite of newspapers and hyperbolic advertisements) a certain mystical and almost sacred authority. They start with a predisposition to be impressed with the printed word, to believe in it, to obey its suggestions. If they met the author and he tried to "put it over them" by word of mouth, their natural instinct would be to resist, to reject his claims to exercise authority.

The author exploits his reader's respect for the printed word. Concealing his merely human physique and personality, he presents himself to the world disguised in the magic and pontifical robes of pure verbiage. To the eyes of the world he offers a vast and majestic dummy of paper. That he should be able to do this is both a good and a bad thing. It is good insofar as it permits of the reader being authoritatively presented with pure ideas divested of any personal irrelevance. It is bad inasmuch as it relieves the author of most of the ordinary responsibilities. It is bad again in that it permits the author to dress up his personal whims and prejudices as universally valid generalizations, which the reader, who would have no difficulty in seeing through the pretensions of the mere man, accepts in print.

I often amuse myself, when reading grave books or serious and apparently omniscient articles, by visualizing the men who wrote them and trying to reconstruct their motives. Between the impressive and awe-inspiring lines of print I see the little author at his desk, scribbling, scribbling, or tapping away at his typewriter. The words are like pronouncements from Sinai, monumentally abstract, impersonal, authoritative. But the little man has a wife and a digestion, ambitions and a history, is short of cash, envies one man, must keep on good terms with another.

The printed word, let us say, makes calmly sweeping generalizations about the superiority of Nordics. I picture to myself some blond and oafish tourist in the Latin countries. Ignorant of every language but his own, he wanders through Southern Europe earnestly and humorously studying the natives. The shopkeepers swindle him, the young girls laugh at him, the porters insult him. How thankful he is to get home! History, he assures us in his pontifical article, conclusively proves the superiority of the Nordic to any other stocks.

Or take the case of the solemn leading article in the high-class newspaper. How calmly above all personalities and petty rancours it is! How wonder-

fully knowing! "The great mass of the electors view with growing alarm the Government's latest policy with regard to our French allies." How little would one suspect the fact that the proprietor of the paper possesses large financial interests in France, that the Government's latest policy may lower the value of those investments, and that his paper must therefore support the *Entente Cordiale* at all costs!

If I became dictator of my country I should promulgate an edict to the effect that all newspapers must publish exhaustive and truthful biographies of their proprietors, editors and writers, showing their financial positions, naming their friends and setting forth their private political, moral and philosophical opinions. I should insist on all articles being signed and accompanied by a photograph of the writer. I should order the daily publication of chatty bits about the owners' and journalists' private lives. In this way the prestige of the printed word would soon be broken. Readers would lose their superstitious reverence for mere print, would learn to see the man behind the words, and, having discounted the personal element, would be in an incomparably better position than they are now to assess the real value of the writing.



Indigenous Simplicity

(Continued from page 288)
of small boys collected and taunted the donkey man and made off with many sticks of cane. Meanwhile the donkey, having completely removed his burden, stood unconcerned in the street with head and ears sleepily drooping. The driver was beside himself with rage and finally did a curious thing. He threw his hat in the air and when it landed in

the street he jumped on it several times, and then, returning to his donkey, rested his head affectionately on the donkey's neck and wept copiously. To him tragedy, rage, and then despair, a whole day's labor gone.

In such incidents as these, trivial and amusing as they seem but in reality very serious to these people, the story of Latin America is exposed.

Jennings of Smyrna

Condensed from Scribner's Magazine (August, '28)

William T. Ellis

IN August, 1922, the overextended Greek line in Asia Minor crumpled, the morale collapsed, and the army rushed to the sea, with the Greek civil population of Asia Minor following them. The Greek army and many lucky civilians got away on Greek ships which were waiting for them. But 350,000 Greeks, mostly women and children, remained in Smyrna, with no ships to take them off.

Enter Asa K. Jennings. He was only a rather recent assistant Y. M. C. A. secretary, who would never get any appointment on account of his size, his good looks, his "air," or his oratory. Here were folk to be fed and doctored and, if possible, delivered. It was Jennings who was one of the moving spirits among the resident Americans to form an American Relief Committee.

The Turks assumed full control of Smyrna; and soon decreed that unless the Greek refugees were out of the city by the end of September, they would be sent back into the interior. Jennings, one day, noticed that an Italian liner in the harbor taking off its nationals had plenty of empty deck space. So he negotiated with the commander to add refugees who could pay the passage-money. (Certain foreign ships, neither British nor American, reaped a golden harvest by exorbitant rates charged refugees.) Two thousand Greeks were crowded on the decks of the Italian ship, as they sailed for Mitylene, only five hours distant. Jennings went along, to oversee the embarkation, and an American destroyer was to follow to bear him back to Smyrna the next day.

As the ship drew into the harbor of Mitylene, a cry of execration rose from

the deck passengers. Behold, at anchor, 25 empty Greek passenger ships—while only five hours away were 350,000 Greeks, praying for deliverance. Back there was need; here was succor—idle.

Jennings lost no time. Ashore, he called a conference of Greek military and naval commanders, the British consul, and prominent citizens. This was rather a cheeky procedure; but Jennings could not wait for the unwinding of red tape. He laid before the conference the appalling plight of the refugees. Thereupon the Greeks began to talk—endlessly.

Then, convinced that the outcome would be futile, he slipped out and went aboard the Greek flag-ship in the harbor. He asked permission to send a message in code to the Athens Government. The sheer audacity of a private citizen's thus addressing the government carried his point; besides, the Greeks throughout seem to have assumed that "the American" must have been some sort of plenipotentiary. Nobody would dare to act so high-handedly without the authority of the great American nation behind him. The nature of Jennings' message made that clear. For it was an ultimatum—declaring that unless the government, before six o'clock that day, ordered the 25 idle ships in Mitylene harbor to proceed to Smyrna, he would broadcast the facts to all the world!

Quickly came back the answer, which, paraphrased, was that of Davy Crockett's coon: "Don't shoot; we'll come down."

Five conditions were laid down by the government reply. First, the American must assume financial responsibility for the ships. That was easy: out of his salary of perhaps \$2500 a year, Jennings

could readily accept personal responsibility for a few million dollars' worth of shipping.

Second, the American himself must assume command of the fleet, and ride on the bridge of the first ship entering Smyrna—so that possible mines or bombardments would have a personal significance to him. Again, easy!

Third, the American must secure the permission of the Turkish Government for the Greek ships to enter and leave the Smyrna harbor. By way of the American destroyer that had come for him, Jennings wirelessed the ranking naval officer in Smyrna to see the governor and get the permission demanded. Within an hour word came back that the Turks agreed to let the ships enter, but were non-committal about letting them leave. A wartime Y. M. C. A. conscience was equal to construing this as the necessary permission.

Fourth, an American war-ship must meet the Greek passenger flotilla as it entered Smyrna harbor and escort it to dock. Clearly outside the functions of a neutral navy! Still, Jennings knew his compatriots in blue, and he could make sure that there would be a destroyer quite accidentally in the channel offing the next morning that the Greek ships could follow.

Fifth, the American must take active charge of the evacuation and of the direction of the ships engaged in it.

If these conditions were met, "the American" could have not only the 25 ships at Mitylene, but also 25 other ships from Pireus. "Done," replied "the American."

Straightway difficulties arose. When summoned to the Greek admiral's ship for instructions, all the captains of the Greek merchantmen began to make excuses—Smyrna and hell were then synonymous words in Greek minds. Not a single ship was reported seaworthy. Then up spoke the Greek admiral—he had not been associating with "the American" for a day or two to no effect. Courage is as contagious as measles. He forthwith reminded the merchant captains that it was a time of war. He

would send naval engineers aboard their ships, and in case of any one found fit to proceed to sea, although reported disabled, there would be a court martial and a possible execution.

The bluff was as effective as Jennings' wireless to Athens. For that night, with "Commodore" Jennings on the bridge of the foremost boat, all of the Greek boats set sail for Smyrna. At dawn, as prophesied by Jennings, an American destroyer was found loafing about the entrance to the channel; and how could it object if "Commodore" Jennings and his fleet followed its course through the mine-field to the inner harbor of Smyrna?

How was this immense flock of frightened sheep to be shepherded onto the waiting ships? Problems of official relationship, of human efficiency, of personal panic, of family unity, of luggage, and of organization, thronged upon Jennings and his fellow Americans, civilian and naval. But they mastered every problem.

No Homer was present to put the epic into deathless verse. It will never be told how the American navy did stevedoring work in getting that motley mass of misery separated and assorted and aboard the Greek boats. There was no help available ashore except American—the Greek merchant sailors and the British were not free to circulate on shore. Only Americans must ever share with Jennings the glory of one of the most singular feats of human service in history.

As pledged by "Commodore" Jennings, all of the ships were returned safely to Greek harbors, after the 350,000 refugees had been transported aboard ship without the loss of a single life. It was efficiency walking hand in hand with audacity and altruism.

Today, Jennings is in Smyrna, in charge of a new Turkish-American social service work for young people. He might be on the lecture platform in America—that deadfall for more than one great doer—but instead he is quietly carrying on by helping to meet human needs.

Education Need Not Be Dry!

Condensed from The American Magazine (May, '28)

An interview with Dr. John G. Bowman, by Sherman Guinn

John G. Bowman is a crusader, and a magnificent 50-story building (now under construction in the civic center of Pittsburgh) is a result of his crusades. He is chancellor of the University of Pittsburgh, which will have for its home this great Cathedral of Learning. Mr. Bowman set out to erect, in the name and for the purpose of education, a building as fine as any devoted to business. He made the people of Pittsburgh see his ideal as he did, and the people of that city subscribed more than ten million dollars to carry out his plans.

"The primary object of the building was to arouse the community to the importance of the university to Pittsburgh. Its next object was to arouse the university itself to its own responsibility. Above all, we wanted a building that would arouse the students to their finest efforts. There is a sublimity in fine architecture that is capable of changing lives. The emotions may be awakened by a great structure just as readily as by music, a great poem, or a great painting."

"TODAY, intellectually America is fast asleep! With all our boasted wealth, we are living educationally in a Dark Age. But there is a new day coming, when schoolboys will find joy that thrills them in discovering and developing their own native capacities, quite as much as in baseball or football; when college students will talk in dead earnest about economics, politics, chemistry, literature, biology, and religion; when great monuments will be erected to teachers as creators of significant life.

"We have not made the child like school, nor have the schools made us an educated and cultured people. We have taken education like medicine, with a

wry face and plenty of water. In brief, we have become unbalanced. We have grown materially but have lagged spiritually and intellectually. Football has superseded the classroom, *not* because there is anything wrong with football but because there is something wrong with the classroom.

"Instead of guiding our youth to understanding, we have been trying to stuff understanding down its throat by a process of forcible feeding, while professors stand by as policemen.

"We have been calling the college, or school, a preparatory course for life and utterly ignoring that it *is* life—that a boy's life is in progress as much when he comes to college as when he leaves it. We have been blaming the boy, the times, and outside influences for many failures that justly should be blamed to the school itself. We have let the classroom be ruled by tradition instead of by need, with the consequences that its methods have become antiquated.

"Give the average boy his choice between attending school or a circus, and he will choose the circus. The circus has set out to capture the boy's interest and has succeeded in doing it. The school has set out to do the identical thing and has failed. When I say circus, I mean any competitor of the classroom for youth's interest—the dance, the theater, football, society.

"The blame belongs on the school, and we should set about to remove it. If teaching methods are bad, we should find new ones. If textbooks are dry, we should rewrite them until they are interesting, or do away with them.

"First of all, at the University of Pittsburgh, we have worked out a way

of getting acquainted with our students. We found the high schools were eager to coöperate. We said, 'When you send us a boy, tell us all you know about him. Tell us of his ambitions, his character, his abilities and his failings.' Further, we invited parents to come and talk with the boy's teachers. We tried to divide classes so that no teacher would have more than 30 students at a time. We asked that teachers spend at least 15 minutes weekly alone with each pupil.

"We began to learn why many students failed. Some simply did not know how to study. Some could not read fast enough to keep up with reading assignments. Some had physical difficulties. Some were misplaced. We began getting at their individual difficulties. The result was that the number of failures in the freshman class was reduced by *two-thirds*.

"Entrance examinations or other intelligence tests overlook many vital things. We had an engineering student who was lagging. He would soon have to leave college, disgraced. The teacher talked with him. 'In all of this world, something must interest you.' 'Yes,' said the boy, and his eyes lighted. 'Birds. I've always loved birds.' The very next day that boy was studying biology—and birds. And for the first time in his life he was awake, alive, eager to study. Today he gives promise of becoming a famous ornithologist. The friendly interest of a teacher found him the career which was his birthright.

"Instead of charging the student with failure, we are demanding of the teacher, 'Why did you fail with that student?' If the student isn't interested in his work, we are asking what is the matter with our methods.

"Personally, I wish we could do away with all cut-and-dried examinations, honors, marks, and even degrees. I wish we could make one real test of fitness, such as life inevitably makes anyhow—the test of accomplishment alone.

"Our chief aim is to arouse the boy's interest. That aroused, he will learn in the very momentum of his interest. A boy wants to become a chemist. He enters the laboratory and is given some sulphur. He is assigned the task of finding out the principal characteristics of sulphur. The teacher suggests the library might be a guide. Perhaps he will flounder for days. Then suddenly he will make a discovery, find a clue. A second clue and he sees a light. Now he is thinking his way; he is getting somewhere; he is elated by his progress. By his own prowess and ingenuity, he has won a victory; and he plunges on to the next, and next. Why, chemistry is not so dull after all! It is a fascinating mystery that he himself can solve! On! On!

"What we mistake for dullness often is only lack of interest, or misdirected effort, as was the case with the boy who loved birds. Look at life as it is; you will find many of these 'dull' lads of yesterday in the seats of the mighty today.

"The real purpose of the school system is to set up in America learning which is life itself. And if the object of the school should be that of arousing the individual, the object of the system should be to arouse the country. Let us send forth from our schools one awakened and enlightened generation, and the next generation will almost awaken of itself. A few such generations will revolutionize the country, because then there will be no question of the partnership between parent and school, and also between industry and school.

"Our colleges have already demonstrated that they can interest youth if they will. Look at our college sports. Physically, we have improved youth and charged the country with the spirit of better health. It remains for us to deal with the head and soul as successfully as we have with the body. It can be done. It will be done."



Clémenceau Talks of Life

Condensed from Personality (August, '28)

Constantin Colas

"I SHOULD like to know your formula for keeping active and in perfect health all the time, just as though age doesn't exist," I said to Georges Clémenceau, who has been a close personal friend for over 50 years.

"The chief factor in the acquisition and retention of health and happiness is work, I am sure," M. Clémenceau said. "I have never loved anything so well as the joy of action. I am contented at the end of a day in proportion to the amount of action put into it, and my health seems to keep pace automatically with my action and my contentment. It all comes about naturally through the alchemy of work. All roads lead to Rome, but the only one which leads to self-realization and complete peace is the road to work. For the poet, words are everything; for the painter, colors; for the sculptor, clay and marble; but for me, action.

"The condition of the mind is so intimately related to the condition of the body that health and contentment seem to come hand in hand, like twin sisters. My work has always been likewise a diversion, and so varied that if I grew tired I could refresh myself by working on another branch of it, just as one has complete change by going from the sunny side of a garden to the shady side. But it's the same garden . . . and I have always carried with me the garden of action where many species were cultivated."

Clémenceau is unquestionably the cleanest man I ever saw. He always wears gloves, his trousers are unfailingly shapely, and the details of his toilette combine to present that "just out of the bathtub" appearance. He enjoys a

complete change of clothing three or four times a day. He has for a long time collected walking sticks and possesses several hundred rare ones.

"I've been consciously collecting walking sticks for 40 years and I've only 300. I've not consciously tried to acquire a single enemy, but they number far into the thousands. It should be *vice versa*. The walking sticks should be acquired incidentally, and the enemies should be chosen with the utmost care, for one can never be too careful in choosing one's enemies. . . . Still, all considered, I believe great men adown the ages have suffered far more at the hands of their little friends than at the hands of their big enemies."

"In all France," I told him, "I'm sure you haven't one real enemy. You are yourself; you are provocative, and people like to argue with you out of sheer intellectual sportsmanship, but if any real harm came to you the heart of the Republic would be broken."

"To be one's self," he went on, as though taking no note of my remark, "is at once the worst and best thing in life, according to whether one wants to be a fool and have happiness based on ignorance, or an intellectual and have unrest based on understanding. How few people are really their own selves! How few of their thoughts are really theirs! They heard them at tea yesterday, the theater the day before, or read them in a book where the author did their thinking for them. Their views are somebody else's, and all that fills their heads is borrowed plunder. They do not give their individualities a chance to grow. Every great personage was himself to the last syllable. The first

requisite to greatness is to be one's self. Enemies are the interest one draws on greatness, and every time a man does a great act, he makes an enemy. Popularity is the privilege of mediocrities."

Everything interests and rouses Clémenceau. The fields speak to him; the beast, domesticated by man, amuses and moves him; the human being that toils in cities affects him. He imparts this great secret: "*Love in order to understand everything; hatred is ignorance; knowledge is love.*"

Such is the sentiment of this gentle "Tiger," who, born in 1841, and still going strong, teaches at the age of 86 the incomparable lesson of energy, and sets an example of an evolved intelligence, and a new departure of life and fresh action.

His whims are strikingly original. He will not write by electric or gas light, insisting upon the old-fashioned oil-burning lamp. He loves the sea with a deep affection and has his house built upon a strand in Vendée almost surrounded by water, and he writes there overlooking the sea. Flowers, in great profusion, grow on his property, but he will not have them tended by other hands. He insists upon doing all the work himself, saying: "They are there for me to work upon and for you to look at." He hates newspapers and will only read the headlines of one—*Le Petit Parisien*. Despite this, however, he is always aware of what is going on in the world.

He loves dancing. Recently, a number of young people made the phonograph play so fast that Clémenceau, trying to keep pace with it, was soon out of breath. So each time he passed the instrument, he pushed the button which reduced its speed, and went on dancing. Each time the young people passed, they restored the button to its former position.

"Is the music too fast for you?" one of the ladies asked.

He answered: "No, but when I learned to dance, I was taught to do it as though I enjoyed it, and not as though I were running to catch a train."

"Will you briefly outline your philosophy of life?" I asked.

"I recognize the presence of evil, but believe in its final suppression, thus contending that this is the best possible world, and that faith and reason are essentially harmonious. Just as labor paves the roadways for humans to walk upon, labor will pave the path to glory. Work! Work! Even the word is an inspiration."

A Good Listener

TWO of us sat together on the terrace of a summer hotel. "See that young woman over there?" said my friend. "A chap is talking to her—talking rapidly, eagerly. Now watch her. She is meagerly endowed—no lure that you can see; and yet there isn't a beauty in this hotel that gets the attendance from men that she gets."

"Is she an heiress?" I asked.

"No. It isn't money. See the way she listens to that chap, her interested expression? She knows a great secret."

"What's the secret?"

"She knows that there is no more gratifying tribute one can give to another than absolute, undivided and sympathetic *attention*. Every man that talks to her finds that he is interesting to her. He just *knows* it, and he likes her for letting him know it. The oil of encouragement fairly pours from her eyes and lubricates a man's ideas."

"You grow eloquent!"

"Why not? Remember what Saint-Beuve said of exquisite Madame Récamier: '*She listens with seduction.*' Her inspired attention invited and drew confidence. That was her great charm, her genius for listening."

—*Editorial in The Mentor.*



Auction Fakes

Condensed from *The Ladies' Home Journal* (July, '28)

James R. Crowell

NEXT time you enter an auction room and hear a man offering a \$75 watch for \$10, look at the lighting system overhead. Fake auction houses literally use a flaming torch as the most indispensable device in their bag of tricks. Count the lights—ten, fifteen, twenty, yes twenty-five lamps of 200 or 300 kilowatt strength to illuminate this little shop, whereas one-fifth that number would be ample.

Keep one outstanding fact always before you—that first, last and all the time the fake auctioneer is a diamond merchant. The more artificial light he has, the more the diamond will sparkle, the more its flaws will be obscured and its yellow tints made to look like blue. If by hook or crook the fake auctioneer can sell you a diamond he has attained his object. He will lead you through a labyrinth of byways toward his goal—joke with you, scold you, stage a tiff between the boss and himself for your edification, sell you a standard article at less than the customary price and turn somersaults, if necessary—but if you linger long enough he will reach his ultimate destination of selling a diamond.

When an expert buys a diamond he makes his tests under natural light with the aid of magnifying glasses, after first immersing the stone in alcohol to remove any chemical that may have been placed on it to give the desired blue color. Then he will put it beside a stone of known value to verify his judgment. The auctioneer selling a diamond waves it before his audience under the glare of powerful light, says it is worth a sum greatly in excess of its value, and starts the competition with a bid from one of his cappers, or with an "air bid."

What chance has the buyer? None. Even if he gets the stone for \$100 when the auctioneer has solemnly averred that it is worth \$500 he may rest assured he has been stuck. What the buyer frequently finds himself possessed of is a doublet, a half-breed composed of diamond and glass. It is made by splitting a real stone of cheap grade at the point where the circumference is greatest, called the girdle, and fusing it with a lower section of plain glass, which has been cut with the usual facets.

In connection with my study of fake auctioneers, I learned from a man who had formerly been one that there is a ring or association with headquarters in an Eastern city, and that the executive sessions of this organization are invariably topped off with a game of dice in which the stake is thousands, that its members include gangsters and ex-convicts, and that it is allied with a group of wholesalers who furnish the tawdry materials they sell from the block.

It is interesting to note that New York is triple-exed as possessing the highest degree of gullibility.

In these spurious marts there is a special trade jargon. The customer is a rummy or chump, and the employe who strikes up an acquaintance with him and induces him to snap up a "bargain" is a ribber. The confederate who poses as a customer and helps to keep the bidding active is variously known as a shilliber, a shill, a booster or a capper. Another valued member of the staff is the switcher, whose duty it is to switch the article bought for something less valuable. The supply base of the ring is a group of dealers in commodities known as flash goods or slum.

Suppose a "great sacrifice sale" is to take place on the occasion of a jeweler going out of business. The shop is put in the hands of a shrewd auctioneer who brings along a lot of bright and shiny things to act as bait. I have before me the written confession of a fake auctioneer telling how the sale is conducted.

"There is no merchandise in these stores that is actually bankrupt stock. The merchandise is bought from wholesale houses who make a specialty of selling to such auctioneers.

"I go up on the block, ready for business. First I grasp a box containing a small article, and tell my audience something like this: 'This is not a fly-by-night, get-rich-quick auction store. We have a variety of merchandise we are going to sell today, and I want you all to feel you are getting a great deal more than your money's worth. I am not expecting any fancy prices, but regardless of what you pay for anything in the store you have it cheap at the price.'

"For my first article I offer the contents of this box, worth about \$7.50."

"Sometimes, not being able to get my bid, I tell the audience I will start it for the sum of five cents, and some lively bidding follows. When I finally get a bid of about \$1.50 I sell the article and tell the audience to step down to the back of the store so they can all see what is in the box. I open it (a four-piece carving set worth about 75 cents) and ask the purchaser if he is satisfied. He generally is not, but not wanting to be embarrassed he pays the price just to be a sport. The reason I sold this article blind was only to have the people flock to the back of the store so as to leave the entrance open for more customers.

"The boy brings me a lady's wrist watch worth about \$7.75. I tell the audience about its 15 jewels and the 48 diamonds on its face. I have a bid of

\$15, but must get more. I tell them that \$60 would be cheap for this watch. I joke with them, and tell them I am going to find out if there isn't more than \$15 in the audience. I pick up a gent's watch worth about \$1.50 and ask; 'Is there anyone here who will give me \$17 for either watch?'

"If I get no answer I inquire if anyone will give me \$17 for both. I tell them I'm not joking; I'm actually trying to find out if there is any more money in the house. Generally I receive a response of \$18, \$19 or \$20—all the way up to \$30."

Here the auctioneer pretends he has overheard someone say that the purchaser must be a friend or confederate, to get these articles so cheaply. The auctioneer gets "insulted" at this, and tells the audience that he doesn't care what the merchandise is sold for, because he gets his ten percent commission just the same. Then, to show that the sale was honest, he asks the block boy if there is another similar watch in the stock, and when one is brought, usually sells it for the same price.

"Then I ask the block boy to give me one of those diamond rings—really ordinary glass.

"I speak to the audience in a different manner, telling them they don't know when they have a real bargain. I don't tell the audience it is a diamond, but they have already heard me ask the boy for a diamond ring. They think it is a diamond ring, but I tell them it is made out of glass or Hoboken mud or fried fish and put it under somebody's nose, telling him to smell it. I am really speaking the truth—it is glass—but they think I am joking. I finally get a bid of about \$30 or \$40 and let it go."

From which ingenuous frankness I believe it will be recognized that trying to beat the fake auction game is one of the most futile things on earth.



The Bad Influence of Good Homes

Condensed from Scribner's Magazine (August, '28)

Jesse Lynch Williams

"WE might as well face the fact," I remarked, "that in these degenerate days we no longer have the Home Life of the good old days."

Caldwell and I were lunching on the terrace after he had beaten me at golf. He looked at me a moment and then shook his head soberly.

"There probably never was a time in the history of the home when members of the same family had such excellent opportunities to enjoy being together as in what you call these degenerate days. One of the greatest improvements of all is that we no longer have so much home life as in the good old days, which, by the way, were terrible." He indicated two men teeing off—Charlie Godwin and his 20-year-old boy. "How often would you have seen that sort of thing in the good old days when sons always arose and usually kept silent in the disquieting presence of their parents, and addressed them in their letters as 'Honored Sir'?"

"Oh, I admit that there was less frankness and friendliness. They seldom used to play games together."

"No," said Caldwell, "it would have made them horribly self-conscious. It is true that not many people now very often enjoy a Quiet Evening at Home in the Family Circle. But who ever did—very often?"

I merely smiled knowingly and told him that, as an old bachelor, he had never had a wife or a home.

"For the modern wife, full of spirit and education," he went on imperturbably, "domesticity must be deadly. Imprisoned all day in the workhouse called home and manacled all evening to a yawning domesticated animal. No

wonder they are rebelling in such numbers against domestic bliss! They know what's good for them. Boredom is not good for anybody. It poisons the system, prevents sleep, and interferes with usefulness the next day."

"All the same," I rejoined hotly, "our grandmothers stood it—I mean, they enjoyed their homes."

Caldwell laughed. "Don't correct yourself! Our forbearing forebears of both sexes stood it—not because they wanted to but because they had to. Most of them had no place to go but home. The dear old-fashioned life was a necessary nuisance. It is still a nuisance, but is no longer so necessary."

"But we've got to keep the home," I declared vehemently. "The family is the fundamental institution of society." I had learned that at college.

"All right, then, you've got to keep it interesting."

"Interesting? The home?"

"Well, don't look at me as if I were a dangerous radical," he cried; "it won't destroy the home to make it agreeable. Do you know the Du Mauriers?" (The Du Mauriers are a large and rather too brilliant family, of French extraction, who cling to their curious Gallic tradition of sticking together, three generations of them all in one house.) "They even enjoy breakfasting together."

"Breakfast?" I asked, laughing; "do you expect me to believe that?"

"But they do," Caldwell insisted; "instead of hurrying away from breakfast for fear of being late for business, the Du Mauriers hurry to it, for fear of missing some of the fun."

"Fun," I asked, "at breakfast? What fun?"

"Oh, just the talk and banter and laughter and smoking together over the second cup of coffee. All three generations of both sexes talk and smoke a good deal."

I reminded Caldwell of an old friend of ours who once remarked to his wife at the conclusion of a week-end party: "Nellie, never invite those people again. They talk at breakfast."

Caldwell smiled. "Yes, that's one of the absurd traditions about home life cherished by people who pride themselves on being reserved because they don't know how to talk. But the Du Mauriers hunt up new stories, just as they do old wine, to bring to the table, knowing how much such things will be appreciated by people of humor, intelligence, and cultivated palates. It is their family custom. In fact I might say that it has now become instinctive with them, this thing of being civilized in that relic of barbarism called the family. They treat one another with as much deference and consideration as if they were casual acquaintances instead of beloved brethren. They listen and do not interrupt, even when they disagree or are not particularly entranced."

"They are people of leisure," I said, "and can afford to make a graceful art of living."

"Not at all," said Caldwell. "They have very little money and less leisure than you have. They all work like the devil, even the old maids."

"But see here," I said, "you and I know that when people get too well acquainted—I mean, when they get used to having each other around they're not so keen all the time—"

"You mean," Caldwell interrupted, "how is it possible for the Du Mauriers to enjoy being together so much? Well, it's because they are apart so much. With or without the other causes of congeniality, that tells the whole story. They are always going away, therefore they are always glad to come back. They are great travelers and great gadabouts. They come home to the family refreshed and rejoicing, teeming not only

with old affection but with new impressions, which they share as generously as some families lavish costly presents. Affluence of that sort is always increased by being shared.

"Nobody," Caldwell went on, "can stand seeing too much of anybody. Mating is natural, but the home, as we idealistically conceive it, is not natural. It is an artificial arrangement, founded on feudalism. It was made for mutual protection, not mutual esteem. Everything else has changed since then, from medication to transportation, but we still try to hang on to our archaic notions about 'the home' and so produce mutual boredom which breeds the most unfortunate kind of contempt."

"You oughtn't to say such things," I protested.

"I know. I ought to shut my eyes and sentimentalize about the blessed joys of domesticity and the sacredness of the home while all our young people find it increasingly abhorrent. Yet if we are going to redeem the home and save the family, we'll have to debunk the one and civilize the other. Why not? There is nothing inherently abhorrent in the idea of the family as a basis for social intercourse. Consanguinity in itself does not prevent congeniality. It is because we have tried to fit ourselves into the home instead of making the home fit us. It's nothing against human nature to try to render human institutions worthy of it.

"But, of course," he added, "people like you always think that people like me are trying to destroy marriage and the home merely because we are trying to salvage them. Simply because 'it is not good for man to be alone,' that does not mean that it is good for man and wife to be alone either. Or parents and children. We are all gregarious."

"You mean we all need human companionship, just as we all need food, but too much of any one kind can make us sick? We need a balanced diet?"

"Ah, you've got the idea," said Caldwell. "That is the chief trouble with family life."

Crocodiles

Condensed from The Saturday Evening Post (July 28, '28)

Delia J. Akeley

IN remote places in Africa where crocodiles have been practically undisturbed by guns, they crawl out of the water during the heat of the day to sun themselves. Often, when the bar is too narrow to accommodate their numbers, these ferocious creatures crawl on top of one another and lie like logs of wood cast up by the flood. Those at the bottom are sometimes completely buried beneath the others. At the slightest suspicion of danger the mass of monsters is quickly galvanized into action, and as they snap and struggle and plunge to safety the water is churned into foam with the violent lashing of their long tails.

It is only a few moments, however, before eye knobs begin to appear on the surface of the water. Satisfied that the danger is past they swim back to the bar and cautiously raise their grotesque and horrible heads. Crawling out on land, they run with unbelievable speed on short, thick, scaly legs to reach their favorite place in the sunshine. It is then that they look like armored dragons of a long-forgotten past.

Like turtles and lizards and snakes, the crocodile lays eggs. With crocodile wisdom, the female chooses a nice sunny spot on a sand bar, where she buries 45 or 50 eggs in a hole. Without further concern for the next generations of saurians, she goes about her crocodile business and leaves her eggs in this marvelous incubator, to be hatched by the ardent rays of the tropical sun. If a baby crocodile were to meet its own mother on a sand bar it would not recognize her.

Fortunately, many of the nests are destroyed before the little crocks are

ready to leave the shell. The Varanus—monitor—lizards, pythons and mongooses have a passion for crocodile eggs and rob many nests. Mischievous monkeys also destroy many nests; I have often seen young monkeys flipping the eggs about on the sand, playing with them exactly as kittens play with a ball of yarn.

As soon as the tiny crocks that have escaped the monkeys and lizards, or the heavy hoof of some animal coming to drink, are ready to leave the shell, they push their way up through the hot sand. From the moment they see the light they are extremely active and independent, for they must fend for themselves. With the wisdom of an adult, the infant crock makes a bee line for the water. I have often tried to block the path of the little black creatures, but have never found one that I could force to run in the opposite direction from the water. The reason for this instinctive caution is, perhaps, that herons and other big birds feast upon them. I have seen cranes, herons and ibises standing guard over a crocodile nest for hours. They cocked their heads to listen, just as robins do when looking for worms in a lawn. At the right moment they thrust their long bills into the sand, and, bringing forth their wriggling prize, gulped it down with as much relish as they did a fish.

Crocodiles live on fish, eels, turtles, otter and other forms of life. Their enemies are few and their food seems to walk into their very jaws. It is only necessary for them to lie like a log under the dark brown water, close to the bank, and when an animal stoops to drink, grasp it by the nose and drag it into the water, keeping it below the surface,

where it is helpless; the animals drown and then can be devoured at the crocodile's leisure. When they attack large animals like the buffalo or a rhino, a mighty struggle sometimes ensues. I have often come across places where the trampled earth and the bloodstains on the bushes bore testimony to a fierce struggle between the four-footed gladiators of land and water. Sometimes all that was left to tell of the tragedy were the deep furrows in the earth leading straight into the water where, foot by foot and inch by inch, the powerful armored monster had dragged his struggling victim down.

The casualties from crocodiles are greatest among native women and children, and although these tragedies occur all too frequently in districts where crocodiles are numerous, the natives never seem to try to avoid them. They will enter the water to bathe, fill their water jars, or walk into a stream to wash their vegetables as casually as if they never heard of man-eating crocodiles. The great majority of natives wear special charms which they implicitly believe will protect them against crocodiles. From time to time the owner of such a charm must visit the witch doctor and contribute a substantial gift to have its powers rejuvenated. If the wearer of a charm is taken by a crocodile, the witch doctor exonerates himself and increases his trade by declaring that the owner failed to visit him and propitiate the fetish.

Of the two fatalities which occurred in the ranks of our black followers on our expedition of 1909-11, one was caused by a crocodile.

One day when we were walking near a river, Mr. Akeley shot a huge crocodile which was asleep on the opposite shore. Without consulting us, two of our porters challenged each other for a race across the stream to retrieve the monster, and before we realized what was happening, had cast off their clothes and, with laughter and yells, plunged in.

One of the men, a strong swimmer, soon reached the opposite bank and,

climbing up, straddled the dead crocodile. Wildly elated over his victory, the boy slapped the back of the monster and shouted facetious remarks to his companion who was exerting his utmost strength to reach the shore.

Although we had given them all the protection we could by shooting into the water, when the swimmer neared the goal we suddenly, to our horror, saw him throw up his hands, clutch wildly at the air, and, with a haunting, bloodcurdling shriek that ended in a gurgle, disappear beneath the water. In an instant there was not so much as a ripple to tell that the man had been swept into eternity.

The problem of rescuing the other boy presented itself. There were no dugout canoes there on the upper Tana, and a raft seemed to be our only solution. The placidity with which the object of our anxiety sat on the opposite bank and dangled his feet in the crocodile-infested water and watched our frantic efforts was unnerving. We could not make up our minds whether he was an utter imbecile or bore a charmed life.

We were forced, however, to believe the latter, for as Mr. Akeley was giving instructions about cutting trees, he suddenly stood up, heaved the dead crocodile into the water, and plunged after it. Ignoring our horrified cries to turn back he reached the body of the monster, and guiding it with one hand, swam leisurely across the exact spot where his companion had so recently disappeared. To surround him with a barrage of bullets, which we instantly did, and pray for his safety was all we could do.

With all the native's pride in being the center of attraction, the boy swam slowly; deliberately he loosed his hold on the crocodile and let it float away, then caught up with it to show his prowess. When he finally touched the bank, Mr. Akeley, exasperated beyond endurance by his foolhardiness, shook him violently. When it was over the boy, still smiling, pointed proudly to his fetishes—a number of tiny antelope horns, and assured us that he was safe from all crocodiles when he wore his *dowa*—medicine.

Making Justice Less Expensive

Condensed from *The American Mercury* (July, '28)

H. H. Sawyer

OUR laws and methods of legal procedure are made with a view to settling controversies wherein expert counsel is employed on both sides. For this purpose the machinery is admirable. But for purposes of settling small claims and differences between parties that machinery is too rigid, too expensive, and too technical to function. To compel people with small differences to submit to technical legal defenses that often are raised for no other purpose than to wear them out, is a practical denial of justice to the poor.

Out of the growing sentiment for reform and simplification of court procedure have grown such innovations as settling estates by trust companies, adjusting industrial accident cases by commissioners under workmen's compensation laws, and boards of arbitration for disputes formerly triable only at law. Not the least important of these simplifications is the multiplication of small-debtors courts and conciliation courts.

The new courts are of two kinds: conciliation courts, in which settlements are based solely upon an agreement of the parties, without which agreement there is no settlement; and small-claims courts, in which there is a hearing before a judge and an arbitrary judgment entered. Both kinds have the advantage of a speedy, non-technical and inexpensive hearing on small claims of every kind. Conciliation has the advantage of persuading the parties to reconcile their own differences and part friends; small-claims courts have the advantage of compelling a stubborn person to pay what seems rightfully due. Perhaps the ideal would be a combination of the two, first attempting conciliation, and then,

if this failed, entering a judgment with the right of appeal.

The history of these small-claims courts goes back to Europe. Something of their kind is in vogue in many European countries. In Norway about 75 percent of all litigation is settled in conciliation tribunals, while in Denmark settlements run up to about 90 percent of the total litigation.

The beginning in America was made in Cleveland about 16 years ago, when a wise clerk of the municipal court began, without any legal authority, to call in disputants in small cases by telephone and sit down with them and adjust their differences, if possible, before any suit was filed. His plan proved so feasible that a small-claims court was established by court order. This court is now handling about 16,000 cases annually and is probably the most successful in America.

In 1915 Minneapolis established a small-claims court. There are now more than 100 cities in the United States that have some kind of small-debtor courts, and the States of Connecticut, Idaho, Iowa, Kansas, Massachusetts, Minnesota, North Dakota and Wisconsin have State-wide laws permitting any community to establish one. The new form of court is specially adapted to cities, as in rural communities justice of the peace courts accomplish much the same thing.

In my own State, Iowa, a conciliation court was organized in Des Moines in 1927. No ordinary claim under \$100 can now be brought in the regular courts until an effort in good faith has been made to conciliate, and a certificate to this effect has been furnished by the conciliator. The charge for a case is \$1, and

this charge covers the actual cost in most cases. When it is remembered that the total time consumed in conciliation, including the time of the conciliator, clerk and all others concerned, is on the average less than 30 minutes, this low cost is understandable.

But more important than the expense are the technicalities, uncertainties and delays of the old way which the new avoids. Very commonly in small cases one party is able to hire a lawyer and the other is not. A defending lawyer may, by filing technical motions, demanding a jury trial, requiring bonds, etc., so involve a poor litigant in a maze, that he is compelled to employ a lawyer or drop the case.

Many small disputes arise over a misunderstanding of the law. When its provisions are pointed out to the parties they have no difficulty in agreeing. The conciliator (who should be a lawyer) after hearing both sides of a case, can advise the parties about the law better than any lawyer could after hearing only one side of it. Many lawsuits are commenced simply because a lawyer's client has not told his lawyer the whole story. Acting upon what he has been told, the lawyer commences what seems to be a very meritorious suit, but when he hears the other side he knows at once that he has no case at all. It is then too late.

Provision is made in this conciliation court that any defendant who may owe a number of claims may come into court and list all his debts. His creditors then come together at one hearing, and an attempt is made to settle all his debts by regular payments into court each pay day, this amount to be prorated among his creditors. Thus if a poor man owes a grocery bill, a doctor's bill, rent, coal, and hospital bills, and his creditors are each demanding more than he can pay, they will be notified by the court of a hearing. None of them alone would accept \$1 each pay day, but when all are together with the conciliator, and it is shown that the man can pay no more, they will usually agree to accept their shares.

Everything said or done at the conciliation hearing is confidential and there is no record made, and nothing said or done can be used afterward if the case is tried. At the hearing the conciliator sits down at the head of a table with the parties on either side and asks the claimant to state his case first. Then comes the defendant, and then the conciliator asks such questions as will make the dispute clear. Finally, he summarizes the law applicable to the case, and when he has reached what seems to him an opportune time he suggests a fair settlement. In a very large proportion of the cases the parties acquiesce at once.

Often the only difference between them is an erroneous notion of the law. One woman thought that because she had married and changed her name a former store bill could not be collected from her. A man said that his opponent could not prove damages in an automobile accident because he had seen it through the windshield, and he (the defendant) had been told that one could not testify in court to anything that had been seen through glass. When put right in these misconceptions they paid at once.

Perhaps the best feature of the conciliation courts is that the parties seldom grow bitter as they do in lawsuits; even when they come in hostile they usually go away friends. When they find that they have not been brought to trial, but that it is merely a private hearing to talk it over and agree on a fair settlement, they fall at once into a conciliatory mood, and are commonly ready to go half way or more to have the dispute adjusted. When they reach an agreement, they have a feeling that, having made it voluntarily, they must abide by it.

The Des Moines court has been in operation less than a year—too short a time for any final judgment of its success or failure. But each month has shown an increase in the number of cases. In the course of time the court will undoubtedly handle more cases than any other court of the city.

The Show-Off Child

Condensed from The Delineator

Winthrop D. Lane

BARBARA was watching David, her older brother, amuse the family. He had been away for three days and was telling what he had seen, imitating a few faces—giving us a travelogue. Barbara had been the center of attention while he was away, and she hated to resign her place in the spot light now. So she grew, each moment, more dejected. Suddenly she walked into the dining room, where she climbed up into her seat at the empty table. "Mother," she called, "come here quick. I have something very important to tell you."

When her mother reached the dining room, Barbara said in solemn tones: "Mother, *I like spinach*. Really I do, mother. *I like it*. And I'm always going to eat it after this."

Now, actually, Barbara disliked spinach strongly. But she could not stand seeing David getting all the attention. So she hit upon the brilliant idea of announcing a right-about-face in regard to that despised article of food. Her trick could not have been more successful. "Oh, do you?"—her mother clapped her hands. "I'm so glad. Let's go in and tell the family."

Barbara only did what all children do. Children love attention. They seek it eagerly, naturally. The child who likes the spot light is normal. Indeed, his desire for attention is closely related to his impulse for achievement. The impulse for achievement is, of course, part of the ego instinct. The child's claim for attention is merely part of that. He likes to pull strings and see people jump; he likes to start forces and watch results. All of this is unconscious, yet an essential part of his personality.

It must be remembered, too, that

children have few ways, in comparison with adults, in which they can obtain achievement or make themselves felt.

But the desire for attention can be carried too far. It can be carried so far that children become nuisances. Why do some children nag? Why do others run to their parents all the time for praise or for other forms of notice? There are whiners and wheedlers—children who seem trained to attract attention. Then there are children who are always up to naughty tricks, apparently just to get people to look at them. The desire for attention can express itself in many ways. Some of these ways are symptoms that the child's adjustment to his world is not quite right.

Children learn to attract attention, of course, at an early age. They learn it, indeed, in the cradle. One of the first acts of the baby is to cry when it is uncomfortable or when it drops its rattle. The cry usually brings relief. Thus, a tendency is established, the tendency of crying-relief. It is easy to encourage this tendency, but it ought to be discouraged. A little firm refusal to be dominated by the child is a good thing.

Did you ever stop to think that children can be taught to attract attention? Suppose we try to teach a child to cry for two hours for a piece of candy. Prof. John Morgan suggests a little experiment.

First, we show the child the candy. When he reaches for it, we withdraw it. The child cries, and we give him the candy; he now knows that crying is a useful means of getting candy. The next time we hold the candy a little longer, making him cry a little longer. So we go on. At the end of our experi-

ments we shall have taught the child to cry for two hours for a piece of candy.

Preposterous as this sounds, it is not at all unlike the way many parents bring up their children, although they do not realize that they do it. But they let the child cry; they allow situations to arise in which the child matches his wits against his mother's listlessness, her indifference, her preoccupation. The child discovers that obstreperous conduct brings results. Children who coax are often treated in the same way. As a consequence, whenever you see a child who sulks, kicks, screams or goes into a tantrum in order to get what he wants, you may be sure that somewhere in that child's environment is a person who can be brought to terms by such tactics.

The other day Bessie Fallon, a little girl who lives near me, was playing by herself near a tennis court. She slipped and fell, but two men, engrossed in their game, did not notice her; she looked to them for sympathy, but got none. She then arose and started for the house. The child was not hurt; not only did she not cry, but she stopped to finger a flower on the way. When within ten feet of her front door, however, she suddenly stood still and began to cry. She howled lustily. Her mother came out, picked the girl up and, kissing the spot indicated by Bessie's gestures, carried her into the house. Bessie had got the attention she planned.

There is another type of manufactured attention-getter. Parents who persist in responding with the same amazement, horror, surprise, shock, anger or other emotion, when their children perform irritating little tricks, or do forbidden things, have only themselves to thank if their children keep up such conduct. They are gratifying that child's desire to do something that produces a result.

Attention-getting tricks may be symptoms of something serious in the child's life. There are two reasons why unhappy children thrust themselves into

the limelight. One is that the child hasn't enough to do, and the other is that he is not sure whether the people around him love him as much as he would like to have them. Both require careful handling; parents ought to be able to read the signs. The child does not know what he is doing; he merely wants attention.

For the troubles of children with too little to do, the remedy is to give them plenty to do. They need the stimulation of successful achievement and of feeling that they are, in some way, able to manage and control things within their environment. That is why simple toys—plastic materials and things that the child can easily manipulate—are best for very young children. Watch your small child push his finger through a piece of bread at the table and become elated, and you will see how easily the creative impulse in a child can be aroused.

The child who is agreeably occupied is not a seeker for attention—he is already enjoying himself. But let time begin to hang heavy on his hands, and he will become mischievous.

The other thing that makes the unhappy child seek attention is feeling unloved. A child gets this feeling in all sorts of ways. He gets it from scoldings and punishments, from threats, from prohibitions. He thinks that a person scolded is a person disliked; to him a reprimand is a rebuff.

But there are more important situations in which the child gets the idea that he is not loved. One of these is when the parents are worried; he merely knows that something is interrupting the calm flow of affection in his direction.

The desire for attention, we must remember, is perfectly normal. Like many things in life, it is disturbing only when carried to an extreme. Then, of course, it becomes a symptom of something wrong, and the intelligent parent will find the cause, if possible, and remove it.



Putting the Midnight Sun to Work

Condensed from The American Magazine (August, '28)

Barrett Willoughby

AT Sitka, one summer day, I was walking with Dr. C. C. Georgeson, the plant wizard of Alaska. We made our way through a field of knee-high strawberries. I plucked one, too large for me to encircle it with forefinger and thumb. Firm, cool, delicious, it melted in my mouth.

We halted beside pea vines eight feet tall and heavy with plump, six-inch pods, containing peas that were sweet and tender. Where peas ended, potatoes began. "This variety yields splendid harvests 60 miles *beyond* the Arctic Circle," remarked the doctor.

It was in 1898 that Dr. Georgeson was sent into the North to see what could be done toward developing homegrown products for Alaskan settlers. One of the world's great experts in cross-breeding, he has thrown the best of his energy into evolving plants and cattle suited to conditions there.

Way back in 1900, at Washington, D. C., Georgeson appeared before the Committee on Agriculture. The chairman recognized in him the man who had been working for weeks trying to get Alaska's annual appropriation for agriculture raised to \$15,000. "It's no use," he said quickly. "Your appropriation is \$12,000 a year, and we're not going to allow you another cent." In those gold-mad days, who cared what Alaskan ground produced if it was not gold!

"All I want now is a chance to tell you the truth about Alaska," said Georgeson.

"But we already know all about Alaska," declared the chairman.

"Mr. Chairman"—a member from Kansas broke in—"you may know all about it; but I don't."

A few minutes later Georgeson was challenging attention by stating that the gold country had agricultural possibilities of more intrinsic value than all its mineral wealth. And then what a land he described to them! A sunny, summerland, with wild raspberries reddening from the southern boundary to the Yukon; wild strawberries sweetening in the shadow of glaciers; wild currants a hundred miles above the Circle. And a midnight sun, during growing time, working 24 hours a day, making the whole section a veritable hot-house. He spoke of the surf-drenched coast line, where ducks fattened on wild rice that tapped a man's shoulder; the Kenai Peninsula above the 60th parallel, where wild hay grew eight feet tall; the Tanana valley, farther north, a-sway with native redtop reaching the height of a bull moose's head; fertile land that could be brought under cultivation and made to produce food for millions of people.

He told of the 22 kinds of native grasses in Alaska, of 16 varieties of wild berries, of 270 species of wild flowers. The committee decided that, after all, \$15,000 a year was not too much to allow a man who was working out the agricultural destiny of such an empire—an empire 13 times larger than the State of New York, and three times the size of the German Empire.

Today, miners operating dredges in the Tanana and Yukon valleys pause in their labors to shout greetings to farmers hauling loads of northern wheat to the flour mill operating near Fairbanks. Today, "Alaska grown" is a phrase seen on advertising placards as far south as Seattle, and the berries and vegetables so labeled command the highest market

price, because of their rare quality and of their surpassing flavor.

"On my first trip up here," Dr. Georgeson told me, "they all looked on me and my mission with pity and derision. I recall passing a group of miners in Juneau. One of them nudged another and pointed at me: 'Hey, boys, pipe the Alaska farmer! Ho! Ho! Ho!' Their hilarious scorn followed me down the street."

The tourist of today exclaims with wonder at Alaskan triumphs of horticulture. I have seen fields where men were gathering cabbages weighing 15 to 20 pounds each. One, unusually large, completely filled a wheelbarrow. Celery, lettuce, and cauliflower all grown on the same generous scale, and the rhubarb has stalks as large around as my arm.

The doctor asserts that the Territory is the greatest berry country in the world, and I can well believe it. Raspberries grow as large as walnuts. Perhaps Dr. Georgeson's finest creation is the Alaska strawberry, eight of which have been known to fill a quart basket. They are almost devoid of acidity and will bear shipping long distances. Their fragrance is such that half a dozen will scent a room. It took 25 years of patient experimenting with more than 12,000 varieties of hybrids to evolve the present delicious berry, which thrives as far north as the Arctic Circle.

It was eight years before Dr. Georgeson found apples that would ripen. Potatoes form Alaska's most important crop today, especially in the interior, where high freight rates double the price of imported vegetables. Through years of experimenting with some 1500 varieties, Dr. Georgeson has evolved 170 kinds of potatoes suited to Alaska. In the Matanuska Valley farms have produced 11 tons to the acre.

Because of the greatly varying climatic conditions, the four experimental stations are situated in widely divergent regions. The Fairbanks station specializes in the growing of grains. The record yield of wheat is 41 bushels to the

acre; of oats, 79 bushels. This in a region with scarcely a hundred frost-free days in a year!

Every variety of barley, wheat and oats raised there is a special creation evolved by Dr. Georgeson and his staff. All parts of the world have been drawn upon to furnish grains for these experiments. Alaskan barley, for instance, had its origin on a plateau 11,000 feet up in the Himalaya Mountains. This is the process of moulding nature to an agronomist's will:

At a time when the barley is about to blossom delicate instruments are used to open a single budding grain. The pollen is removed, and pollen from another selected variety, similarly taken, is introduced to fertilize the pistil of the flower. This operation succeeds only if it is performed exactly at the right time and in the right manner. If a success, it results in *just one kernel* which partakes of the character of both parents. This single grain is planted the following spring, and its growth watched with affectionate solicitude. Its yield is a new creation, and one which can be perpetuated.

"The Alaskan farmer," Dr. Georgeson told me, "has, perhaps, an easier time than any other farmer on the globe, once he is established. As yet there are no insect pests and potato bugs in the country. Nor is the virgin ground naturally weedy. By the end of May the farmer must have his grain in and his potatoes planted. He can leave his farm and with a serene mind go off to work in the mines, do road work, or put up salmon for himself or for the market. In August he comes home to harvest. By the end of September, his crops are disposed of, and he can again turn his attention to other matters.

"We Alaskans are but making a beginning in agriculture. My heart is glad because I have been permitted to have at least a part in the important work of preparing for that time when Alaska's valleys will be peopled with millions of hardy, prosperous homemakers."

Indian Bureau Brutality

Condensed from Plain Talk (August, '28)

Hon. James A. Frear

COMPARATIVELY few persons realize that today, under the maladministration of the Indian Bureau, the majority of Indians are being appallingly treated. In no other civilized country is an intelligent, well-behaved people kept in such complete subjugation of person and property as are some 225,000 Indians under our disgraceful departmental despotism which deliberately degrades them to a virtual state of peonage.

Tens of thousands of these Indians are well educated and highly intelligent. During the World War, thousands of Indians volunteered and fought side by side with their white brothers. Because of this, Congress gave to all Indians full citizenship.

Under the *law*, then, Indians are entitled to every right guaranteed by the Constitution but, under the arbitrary decrees of the Indian Bureau, no less than 225,000 Indians are declared "incompetent" and are denied both possession of their property and enjoyment of fundamental civil liberties.

Indeed, the Indian Bureau holds itself above the law and, in the disposition of property belonging to "incompetent" Indians, considers that its acts are not reviewable by the courts. More than \$90,000,000 in cash and securities and more than \$1,600,000,000 in land and personal property belonging to Indians, are under the exclusive control of the Indian Bureau, while the owners are denied any voice in its disposal. In consequence, the property of Indians has literally been looted to the extent of millions of dollars.

Many individual charges of injustice in dealing with property rights have been

brought against the Indian Bureau. Perhaps the most notorious in recent years was the case of Jackson Barnett, an old, feeble-minded, Oklahoman Indian who had become a millionaire overnight through discovery of oil on his property. From sworn evidence in court proceedings, it appears that a white widow of a certain repute got Barnett drunk, took him into Kansas, married him while he was still intoxicated and then, it was charged, employed an attorney to negotiate with the Secretary of the Interior and the Indian Bureau to divide Barnett's estate of \$1,100,000 equally between his wife and a Baptist mission school. According to the record, \$50,000 was paid in this case to a man described as a close friend of Commissioner of Indian Affairs, Charles H. Burke. This case was so raw that the Department of Justice intervened and the entire proceeding was set aside.

A recent act, sponsored by the Indian Bureau and passed by Congress, took away from the Flathead Indians a power site valued at \$100,000,000. The bill was finally amended by Congress, but in a hearing before the Senate Indian Affairs Committee Senator Burton K. Wheeler said to Edgar B. Merritt, Assistant Indian Commissioner:

"You have a department that is supposed to be acting as guardian of the Indians, but instead you have stood silently by and seen the resources of the Indian demolished. That is what has happened on the Flathead reservation in Montana, and I challenge anybody to show me where the Indian Bureau has made a protest when the Indians were robbed out there. Every provision of the treaty that was entered into in 1855

was broken by Congress and neither Mr. Burke (Commissioner) nor yourself ever came and protested."

In other instances, the Indian Bureau uses tribal funds to build bridges and roads which are used almost exclusively by white tourists. Glaring examples are the Lees Ferry "Navajo bridge" across the Colorado River and the "Pima bridge" across the Gila River on the automobile trail from Tucson to Phoenix, Arizona.

One hundred thousand dollars was charged to the tribal funds of the Navajo Indians for the Lees Ferry bridge, which, it was said, would "facilitate their communication with the whites and assist them in their progress to a more advanced civilization." *Actually no Indian lives within 25 miles of the bridge site.* The bridge is intended purely for the benefit of tourists who visit the Grand Canyon. To make the swindle worse, the Navajo reservation is badly in need of funds for health and education.

The Pima bridge stretches across the dry bed of the Gila River. Water rarely flows in the Gila River and it is possible to ford the river bed with automobiles for 360 days in the year. The Pima bridge is part of the direct tourist line from Phoenix to Tucson and benefits no one except tourists and the business interests of these two cities. *The Indians continue to cross on the ford they have used for centuries.* The Pima Indians are very poor; yet the tourist bridge is charged against their tribal funds.

Two years ago the Indian Bureau supported a bill which would have thrown open to entry 22,000,000 acres of oil lands belonging to Indians on terms whereby the Indians were to get only a five percent royalty instead of the usual 12½ percent. This bill was vetoed by the President. Secretary Fall actually ordered these lands thrown open to entry and a scandal that would have dwarfed Teapot Dome was barely averted. The Indian Bureau favored the private oil interests by vigorously supporting the leasing bill as first presented.

Even more serious than the wrongful seizure of property is the flat denial of

the constitutional rights of Indians. For some trifling infraction of arbitrary decrees—such as leaving a reservation without permission—Indians have been sentenced for as much as six months in jail by "judges" appointed by the Indian agents. No such court is authorized by law; yet some ten-dollar-a-month "judge" denies Indians the right to be represented by an attorney, denies them the right of trial by jury, and finally denies them the right to appeal from wholly illegal convictions.

The following telegram sent by the Governor of Wisconsin to President Coolidge in 1926 speaks for itself:

Responsible woman, whose word I believe, reports that Paul Moore, an Indian, charged with a misdemeanor, was found at Lac du Flambeau Agency jail, in a cell 6 by 8 feet, with clogged toilet, and with ball and chain fastened to his ankle. In the same jail were incarcerated Indian women. This condition is abhorrent to dictates of decency. This is the tyranny of dark ages, terrorizing the Indian, who needs help more than a jail. In the name of humanity I beg that that sort of thing cease.

John J. Blaine
Governor of Wisconsin.

The Indian Bureau, years ago, adopted a policy of establishing "show place" schools in far Western cities where, it was announced, by separating Indian children from their parents and freeing them from tribal customs, a "white man's civilization" would speedily be taught. Among the tribes of the Southwest, the cruel policy prevails of taking Indian children from their parents and sending them to schools hundreds of miles distant. Children as young as six years are taken away from their parents—often forcibly—and in many instances, are kept away from home for four years at a time. Thousands of children have been virtually kidnapped under this system, and parents have even been jailed for protesting against the outrage.

To make it worse, these schools are often terribly over-crowded; the food is often both bad and insufficient; and sanitary conditions frequently are such that an abnormally high death rate brands them as being little better than juvenile pest houses.

In 1926 the Luepp Boarding School on the Navajo reservation suffered epidemics of influenza, measles, and pneumonia.

Dr. S. S. Warren, the physician stationed there, after daily and fruitless requests to the superintendent for more nurses and medical assistance, while children were dying for lack of supplies, telegraphed directly to Indian Commissioner Burke:

We have had an epidemic of measles and influenza since March 17. Four deaths and typhus suspects in hospital now. Dormitories and hospitals are foul with contagion. No sanitary measures have been taken in conformity with public health and state laws to clean up.

Dr. Warren did not get any aid from the Commissioner. Instead he was rebuked for going over the head of the superintendent in his appeal.

The health of the adult Indians is neglected in the same shameful manner. Dr. Haven Emerson, Professor of Public Health Administration in Columbia University and former Health Commissioner of New York City, makes the following statement:

"Outside the boundaries of Russia, India or China, I know of no section, race, or tribe which now exhibits such tragic neglect of the most elementary protection against preventable sickness and death as is to be found among the American Indians.

"If ever there was a proper subject for a Congressional investigation, it is the administration of a government service which in the richest country in the world permits practical enslavement of person, theft of land and produce, impoverishment of funds, and the virtual starvation of thousands of our wards, which, together with disease, are combining to destroy a race older than our own. The neglect of the health of the Indians is recognized by all health officers of this country and by the informed medical profession as a classical example of governmental incompetence."

Incontrovertible facts amply justify this statement. The Indian death rate increased 48 percent from 1920 to 1924, the last year when the Federal census tabulations were made. The death rate among Indians in a registration area of 33 states is two and one-half times the white death rate—and is increasing. The Indian tuberculosis rate is six times the white tuberculosis rate in the same

states and, for the country as a whole, the Indian tuberculosis rate is seven and one-half times the white rate. The Indian death rate for infants one year old or under is nearly three times the mortality rate of white infants. More than 60,000 Indians—21 percent of all those under Indian Bureau control—are suffering from trachoma, a disease often causing blindness, and of which the chief contributing cause is malnutrition.

Dr. Frances Sage Bradley, director of the State division of child welfare, Montana, writes regarding conditions there as follows:

"Pathetic and hopeless is the physical condition of young children and the eagerness of the mothers for help. We have held what we call children's health conferences on various reservations, and men and women have sledged their children 35 and 40 miles in snow on a level with their roofs, with the thermometer 14 below zero, to find out how to cure rickets, trachoma, tuberculosis. What can we tell them? I want to state that nothing but a prompt, vigorous, baby-saving program can prevent the extermination of the Blackfeet. Their maternal and infant mortality is shocking, and their superintendents admit that their seeming increase is limited to half-breeds. The end is inevitable."

Dr. C. A. Harper, State health officer of Wisconsin, says regarding the Indian tribes there:

"The reservations are filled with the most prevalent contagious and infectious diseases; they are infecting the white communities, and the laws are such that the State health officers are not allowed to do anything about it."

I do not believe a stronger statement can be found than that put forth by Drs. Allen F. Gillihan and H. B. Schafer, appointed by the governor to make a survey of the conditions of the Indians of California. It concludes:

As a result of two months' sojourn and field study among the Indians of northeastern California, the following conclusions have been reached:

1. That the ill treatment of the Indians (of California) during the past 70 years has resulted in reducing the population from over 100,000 to about 17,300.

2. That the Indians are now living a hand to mouth existence.

(a) In houses not fit to live in.

(b) Upon land that is useless.

(c) Without water.

3. That they are not receiving an education worthy of the name.

4. That a great deal of sickness exists among them, and they are receiving absolutely no care.

5. That they are not receiving any advice, assistance or encouragement in their business dealings with the outside world or in the personal side of their lives or in the lives and health of their families.

Despite this shameful record of criminal incompetence, the Indian Bureau has stubbornly refused to transfer its so-called medical service for Indians to the United States Public Health Service, although this was urged by a special committee of the House of Representatives in 1920, and the proposal was seconded by the Board of Indian Commissioners. The Association of United States Army Surgeons and the Association of State Health Officers also urged this transfer.

Recently, Indian Bureau officials in press releases have tried to offset these charges of neglect, disease and poverty by pointing to the large per capita wealth among the Indians. But practically the entire increase in wealth is from oil wells in a limited district. Not five percent of the total number of Indians probably have reaped any benefit, direct or indirect, from the oil wells. California Indians, for instance, have no more right to a fortune made by an Indian in Oklahoma than they have to the diamonds in the Czar's crown.

Unfortunately, the Indian Bureau, as now constituted, will not act on friendly suggestions for reform. This is understandable in that \$1,600,000,000, the bureau estimate of Indian property, is a very juicy plum to control, and \$90,-

000,000 a fine sum of money to handle where no responsibility exists for interest, where no board of directors can meddle and no judge can interfere, as in other cases of trusteeship and guardianship. Yet starving Indians are with us today. But if the states could show, as they surely would, that local care of Indians is vastly better than the Indian Bureau record of neglect, then other extensions of state supervision would follow and soon a number of Indian Bureau officials would be seeking new jobs.

The time has come to demand a square deal for these wards of the nation who are being decimated by disease, neglect, and starvation. Not one argument can be advanced for the continuation of this cold-blooded Indian Bureau policy which savors of the Spanish Inquisition. We have had nearly a century of this bureaucratic control. Expenses have grown as the Indians' property has diminished and the bureau employes have increased as the Indians have decreased in number. Today the criminal maladministration of the Indian Bureau not only justifies but demands its abolishment and provision for some temporary substitute until the Indians can be released from their present position of peonage.

Fortunately, the Senate Indian Affairs Committee already has appropriated money for a survey of the conditions among the Indians. If the investigation is vigorously conducted—and I believe it will be—the facts revealed will shock the conscience of the American people and create an overwhelming public sentiment in favor of any constructive remedy suggested by Congress.



"Robinson Crusoe's Children"

Condensed from Natural History (May-June, '28)

H. L. Shapiro

ON two remote South Sea Islands, Pitcairn and Norfolk, dwell the descendants of the notorious mutineers of the "Bounty." With only intermittent contact with the outside world, this two-fold colony has maintained its integrity for almost 140 years.

The history of these islanders goes back to the 18th Century when Bligh, in command of the "Bounty," sailed from England to bring the widely heralded breadfruit of Polynesia to the West Indies, where it could be grown as food for the plantation slaves. In October, 1788, ten months after leaving England, the "Bounty" reached Tahiti. It is easy to imagine the delight of the sailors on landing at one of the pleasantest of the South Sea Islands, where both Nature and the natives were kind.

After six months spent in collecting plants, Bligh set sail. The partings were melancholy, and it was with evident reluctance that the crew set their sails. Early one morning, soon after, the "Bounty" was in the neighborhood of the Friendly Islands when Captain Bligh was forcibly awakened by several armed men and discovered that he was the prisoner of a mutiny led by Fletcher Christian, the mate. He, with 18 of the crew who were faithful, were put adrift in a small boat weighted down almost to the gunwales. Only scanty provisions, consisting of 150 pounds of bread, 32 pounds of pork, 6 quarts of rum, 6 bottles of wine, and 28 gallons of water, were furnished. Bligh, in his crowded, under-provisioned boat, boldly sailed for Batavia, and his voyage of 3000 miles, completed in 46 days, over uncharted and dangerous waters, has remained to the present day a classic in navigation.

Christian, at the head of 25 mutineers, now returned to Tahiti, where the men separated into two parties. Sixteen of the men remained in Tahiti. The other nine, anxious to be safe from a punitive expedition from England, left Tahiti, taking with them about 12 native women and six native men.

Not until 1808 was it learned what became of them. In that year Captain Mayhew Folger of Boston was very much surprised to find himself hailed in English by the children of the mutineers when he touched at Pitcairn, which he believed to be uninhabited. He learned from the sole surviving male, John Adams, that on reaching Pitcairn in 1790 the "Bounty" was destroyed so that there might be no defection.

Owing to the treatment which the native men received at the hands of their white companions, they soon rebelled. Dissension among the sailors on account of the women and fighting with the native men led to a series of horrible and brutal crimes, which ended in the murder of all the native men and all but four of the sailors. Of these, M'Coy discovered an intoxicating distillation and jumped over a cliff in a drunken frenzy. Quintal was murdered by Young and Adams in self-protection. The only natural death was that of Young, in 1800, leaving Adams alone with the women and the children of the sailors with the native women. Later visitors described Adams as a patriarchal figure, fathering the whole colony, imparting his small store of learning and religion to them.

So idyllic was the life of the Pitcairn Islanders after the first violence that this remote island served many a preacher

for a text on the beauties of a Christian life. Copies still exist of a small Sunday School pamphlet printed early in the 19th Century which related the story for young readers.

In 1855 the colony petitioned the British Government to remove them to Norfolk, which was being abandoned as a penal island, as Pitcairn had grown too small for their numbers. This was done, and though after a few years several families returned to Pitcairn, the principal group still dwells contentedly on Norfolk.

One of their most interesting contacts was with the New England whalers who swarmed in the Pacific in the middle of the last century. Many of the young men shipped on long cruises, returning with Yankee tricks of speech and customs. Frequently the captain would leave his wife at Pitcairn to be picked up on the return voyage. During such visits the housewives introduced many innovations, so that even at present pie is a favorite dish. During my stay at Norfolk I was the guest at a Thanksgiving dinner at which all the traditional dishes were served.

The principal occupation is raising sufficient food to supplement the wild fruits that grow abundantly. Whaling, learned from the whalers, is also practiced. For entertainment the Norfolk Islanders are dependent on European games. Tennis is a favorite sport; cricket, football, and horse racing are also popular. Checkers, cards, and chess find enthusiastic devotees. During my visit a weekly dance and a weekly moving picture show were given. The social life is very hearty and informal. Moonlight picnics, garden parties, and other social gatherings are always hilarious; a strong love of music is common. Most of the islanders are affiliated with the Church of England.

The present population is approximately 600 on Norfolk and more than 175 on Pitcairn. Many of the younger members of the community have, in recent years sought wider opportunities on the mainland, where they have married and settled, so that the total number of

living descendants of the mutineers is probably more than 1000.

To the anthropologist, the chief interest of the islanders is that here is an example of race mixture between two contrasted races. In studying race mixture it is always discouraging when one attempts to define ancestry precisely. But the Norfolk Islanders have kept records of marriages and births, so that I have been able to make genealogical tables which go back to the original cross, and determine the proportions of Tahitian and English in the population. There is somewhat more English "blood" in the present generation. In a small proportion of the population traits such as blue eyes, blond hair, and fair complexion are combined in one individual. On the other hand, one finds, according to expectation, a number of individuals who are strikingly Tahitian in appearance. On the whole, Tahitian and English characters form a mosaic, some individuals tending toward the English and others toward the Tahitian. Heterosis or hybrid vigor, which is frequently observed in the first generation after the original cross, is well illustrated in the stature of the Norfolk Islanders. Early records indicate that the hybrids in the first generation were considerably taller than either Tahitian or English. Although this excessive stature has diminished, it is still greater than that of the parent stocks.

From necessity the islanders have inbred from the beginning, so that now after five or six generations, everyone is related to the rest of the community. In some cases the degree of blood relationship between husband and wife is extremely close. Yet there are no evidences of deterioration. On the contrary, the Norfolk Islanders are tall, muscular, and healthy. That inbreeding mysteriously produces degeneracy is now disproven by animal experimentation. Among these islanders we have another example that inbreeding in a sound stock is not attended by the traditional stigmata of degeneration. One can only hope that this fascinating group may be allowed to maintain its identity.

Your Emotional Age

Condensed from the Red Book Magazine (July, '28)

Frank Parker Stockbridge, Author of "Measure Your Mind"

"O H, Mother! Be your age!" I glanced toward the next table at the sound of the cool but emphatic exhortation. Something had gone wrong with the service, and the plump, overfed matron seemed about to burst into tears. There was that in her expression of a spoiled child whose toy has been taken away.

But there was nothing infantile in the manner of the calm, poised little flapper daughter. "Don't mind Mother," she said to the somewhat embarrassed young man with her. "She was raised a pet. I don't think she'll ever grow up."

"What a hard-boiled little beast!" exclaimed my companion.

"What a perfectly competent citizen of the machine age," I rejoined. "Commend me to the modern young person who looks at life as it is and doesn't spill her emotions all over the place. That girl put her finger precisely upon the weakest spot in our new civilization."

"Be your age!" Why, that's what all the new discoveries about human behavior boil down to. Everybody is either a grown-up or a *Peter Pan*, who refuses to grow up. And we fit or we don't fit into the crowded herd which the machine-made civilization has forced us into, in exact proportion as we have our emotions under control or not.

The gist of the new psychology is this: *If your emotional age is not that of maturity, you haven't grown up yet. And most of the grief and suffering in our private lives comes about through our failure to grow up emotionally.*

"No adult is more mature than his emotions," says Prof. Ernest R. Groves. To the new-born baby there is no world

outside of itself. Its emotions begin to develop when its instinctive desires begin to be thwarted. And it is the persistence into adult life of the instinct of self-assertion which makes so many of us act as if we were still infants. It is so much easier to start an emotional storm than to keep one's instincts under control.

The place in the world for the emotionally self-centered person is getting smaller and smaller. The concentration of population is now making us learn how to live in a crowd. Civilization is, after all, largely a matter of manners; and good manners are a matter of emotional self-control. Someone has correctly defined a gentleman as one who never gives offense *unintentionally*. It signifies a man who has been so trained in self-control from infancy that it has become a secondary instinct with him to avoid ruffling the sensibilities of other people.

The successful adult life is that which is adjusted to the give-and-take of contacts with the crowd. And the crowd does not tolerate emotional manifestations which have no other basis than the frustration of one individual's personal desires. Yet emotions, properly controlled, are the ruling force in every human life. They override reason or logic and take control of every fiber of the body when given half a chance. They inspire men to deeds of courage and heroism, and they fill the prisons and the insane asylums. Every one of us has all of the emotions, in varying degree, waiting only to be aroused under sufficient stimulus. The test of whether we are grown-ups or *Peter Pans* is whether we express our emotions childishly or sanely, in adult fashion.

"I never let anybody know it when I get angry," the head of a business organization once told me. "I get away as speedily as possible and go up to the gymnasium on the top floor. There I put on the boxing-gloves and fight it out with the trainer or a punching bag. If I don't do that, I am positively ill for two or three days after losing my temper."

What this man does is just what Nature intends everybody to do when angry—to fight. Anger, like most emotions, stimulates the ductless glands which pour "hormones" into the blood, stimulating the fighting muscles. But if there is no fight, it takes the system hours to eliminate the fighting hormones.

I sometimes meet a business woman of my acquaintance striding through the park at a furious pace. "It's a choice between walking off my worries or going to bed with a sick headache," she told me. She knows how to get rid of her emotions. She is grown-up, while the woman who gives up to a sick headache from worry is still an infant. Worry, the little sister of Fear, acts on the ductless glands as anger does, except that its stimulus affects the leg muscles. The animal's instinct when afraid is to run. Isn't it your own impulse to pace up and down or go for a long walk when you are worried?

The secret of fitness for life in this civilized world is in discovering ways of working off one's emotions without being a nuisance to others, not in completely suppressing them. The *Peter Pans* burst into tears, have "tantrums," accuse others of being to blame for their troubles. The man who in silence suffers wounds to his self-esteem during business hours, only to take it out on his family when he gets home, is not grown up, however he may seem to his business associates. The woman who simulates illness to arouse the sympathy of her husband is still an emotional infant.

The *infantile* desire to be conspicuous

manifests itself in a thousand mannerisms of dress, speech and conduct. The woman who lives beyond her husband's means, the man who buys a more expensive car than he can afford, are emotional infants who have carried into maturity the desire for adulation, perhaps repressed too sternly in infancy, perhaps too freely gratified by over-indulgent parents.

Vanity, the urge to be admired or feared, survives from infancy in almost everybody, and finds expression in immature adults in ways which are sometimes foolish, sometimes dangerous. The boy who finds that the world will not take him seriously may turn killer merely to impress his own superiority. I once interviewed a prisoner awaiting execution in jail who sulkily refused to talk unless he was guaranteed a walnut coffin with silver handles and that his story would go on the front page. He was going to the scaffold in the public eye, with his self-esteem, lost since infancy, restored to him at last.

Most immature adults don't want to be cured. They prefer to go through life expressing their emotions without restraint. The time and place to begin the cure of emotional infantilism is at home, in the cradle. The girl who said that her mother had been "raised a pet" put her finger on the commonest cause of emotional inability in adults. A girl or boy who has been "raised a pet" stands a better than even chance of growing into a person with whom nobody can live happily.

"I'm going to have two more babies," a woman who was already the mother of a boy and a girl announced. "A flock of four will knock the nonsense out of each other, and when they grow up they'll know how to behave among their equals."

St. Paul expressed the same idea when he wrote: "When I was a child, I spake as a child, I understood as a child, I thought as a child; but when I became a man I put away childish things."



An Open Letter to Mr. Coolidge

Condensed from Vanity Fair (August, '28)

Corey Ford

"President Coolidge will be able to go out of a morning and come back with a two, three, four or even five-pound trout whenever he chooses, having announced in advance just the weight he will bring home. It seems that H. Clay Pierce built no fewer than 15 ponds on the place, in which are to be found brook, brown and rainbow trout, distributed according to weight, which varies from one to five pounds." *New York World.*

Dear Mr. Coolidge,

I suppose by the time you get this letter that you and Mrs. C. will be comfortably settled in your log cabin at Cedar Island Lodge. I was awfully sorry you couldn't accept Mrs. Ford's and my invitation to spend a couple of weeks with us at our country place in Far Rockaway, because you would have liked the Jenkins who live upstairs over us; but I understand that would have cut you out of the trout fishing. Of course we could have arranged with the lobster man to leave some fresh sea-food every morning, but it wouldn't have been quite the same thing as catching the fish yourself.

From what I read in the papers, Cedar Island Lodge must be pretty near ideal for you, Cal. I understand that there are 15 different pools on the property, and each pool holds a different kind or weight of fish. There is just one thing about this arrangement that worries me, Cal: when a five-pound trout eats too much food and can't make the weight any more, do they dig a six-pound pool for him, or just throw him away?

Well, sir, these fish are bred in a special hatchery, according to the newspapers, and of course there is always a reserve

supply on hand, carefully weighed, sorted and recorded in a large card-index. Whenever you pull, say, a three-pound rainbow from Pool No. 8, you simply check it off on a little card and hand the memo to a Secretary, and he sends over to the hatchery for another three-pound fish to take its place. For example, let us suppose that you are setting out for a day's fishing.

"Well, Mama," you ask, glancing over the catalog, "what'll it be today? A four-pound Brown Trout, say, from Pool No. 14?"

"Oh, you caught a Brown Trout yesterday. We don't want *all* Brown Trout."

"Then how about a two-pound Speckled Trout?"

"Now, Calvin, the *New York Times* is photographing you today, and you *know* how Speckled Trout show up your freckles."

"Well, then I guess it'll have to be Rainbow. Shall I catch a five-pounder?"

"We'd never eat five pounds of fish a day, and you know it."

"All right, dear. Hello, hello," jiggling the telephone, "is this the hatchery? Mr. Coolidge speaking. I've decided to catch a three-pound Rainbow today. Style 47 G, on P. 118."

"Yes, sir," replies the hatchery. "Do you want to go down to Pool No. 8 to catch it, or shall we deliver it to the house?"

"Well, you might send it over, and I'll catch it here. And don't forget to toss in a few worms."

And then you tumble eagerly into your fishing-togs, while Mrs. Coolidge calls up the reporters and camera-men to photograph the day's catch.

And talk about tame! Every one of these trout, it seems from the newspapers, were personal friends of Mr. Pierce, who treated them more or less like pets, and fed them such delicacies as liver; and when they see you paddle over the pool in a canoe, the trusting fish will imagine it is someone bringing more food and will swarm about the boat so thick that you can scoop them up with a bucket. (Of course, I know you *wouldn't* scoop them up with a bucket. You'll be a real fisherman, and scoop them up with a worm.) You couldn't ask for better fishing conditions than that, could you? All you will have to do is to cut off their supply of liver for a couple of days; and when you are ready to fish, the trout will be so ravenous that they will snap at a red flannel undershirt. (I wouldn't go wearing that Indian war-bonnet too near the pool, Calvin, honestly I wouldn't.) Simply disguise your worm as a piece of liver, by hanging a strip of bacon beside it, or else lowering another hook with a side dish of onions; and you can pull the fish out with your bare fingers. If you have any trouble, just mention who you are.

I can just imagine the hustle and bustle that goes on around Cedar Island Lodge when you decide to go fishing. While some run to tell the newspaper men, the others rush around tidying up the pools, setting out the camp-chairs, and cleaning and polishing the trout.

The cry finally runs through the crowd: "Calvin's coming!" In the van of the parade, of course, are the 60 soldiers that have been sent to guard you in your summer retreat; and very snappy they look as they march two abreast along the old trail, followed closely by several Secretaries with toy shovels and buckets of milk-fed worms. Behind these a *anc* in succession a Secretary with your rod, or "pole" as you call it, another with your line, or "string," and a third with your hook or "hook." These take their places along the edge of the stream, where they fit your tackle

together and push the eager fish back from the bank.

And now comes Mrs. Coolidge, accompanied by practically all of the White House pets, including four white collies, two airedales, a mongoose, a bear, several raccoons and a newt; and amid considerable confusion these pets are finally grouped in such a way that every one is in plain view at once.

A second large group of men advance down the trail, half-crouching as they bend forward over a number of cameras. There is a growing clicking noise as they draw nearer; and at last you appear at the end of the procession, dressed in your celluloid collar and plain business suit, and smiling to the left and right.

All is in readiness. You have accepted the rod from one Secretary, the line from another, while a third has tied on the hook. Several Secretaries meantime unearth a number of worms, and these are embedded on the barb, amid cheers from the crowd. You are holding the rod in one hand and a small American flag in the other, and facing toward the cameras, at about a three-quarters angle, opposite Mrs. Coolidge, who is doing her best to hold the four collies and the bear and still look pleasant.

Then an assistant hastily unwraps a paper parcel, from which he removes the Three-Pound Rainbow Trout. The fish is hung on your hook; and before the smoke of the flashlight powder has blown away, the roto gravure sections are announcing to a waiting world: "President Coolidge Shows Prowess as Angler; Proudly Displays Morning Catch to Mrs. Coolidge."

Before you know it, Calvin, you will have earned a real reputation as a fisherman, provided the worms hold out. Wishing you the best of luck, A'f'y,

COREY

P. S. Sometime you must run down to Washington Market with me, Cal, and try for tarpon.



Can This Pony Think?

Condensed from Hearst's International Cosmopolitan (August, '28)

Zona Gale

OLD Mr. Barrett came from nowhere to the door of Mr. W. W. Fuller's great house in Briarcliff, New York, and with him came his Shetland pony, Black Bear. Piece by piece Mr. Fuller has learned Barrett's romantic story—how he first noticed that Black Bear had a memory, and how from the beginning of that discovery he began to test the pony's mind. Marvels began. They have never ceased.

For two periods of two hours each I have sat with a small group of friends before this little pony, and have watched him reply to questions. He replies to *your* questions, while his 70-year-old owner stands silent in the background. Black Bear knows everything you say to him, and ten years of training have given him the means to express himself.

Entering the disused carriage house which is his home, you see the gentle little horse turn to look expectantly at you. Before him are two open fences of gas-pipe, two-barred, on which are hooked tin triangles, each bearing a letter of the alphabet, or a figure from one to nine.

The five of us who had gone to visit him sat down and asked him these questions—and bear in mind that the owner stood behind the pony and that any

theory of signals passing between them is impossible.

"Black Bear, where are we from?"

At once Black Bear began, with his mouth, to choose and take off the alphabetical triangles daintily, shaking every one until his owner leaned forward, took it from him and replaced it on the bar. So the pony spelled out:

"New York."

A reasonable assumption as the few who go out to see him nearly all do come from New York. *But observe that the pony understood the question.*

"Do you like to go to New York?"

A vigorous nodding of the head is the reply—Black Bear's invariable form of affirmation.

"What do you do in New York?"

He selects the letters. "E-a-t."

Now the owner approaches with a small blackboard, stands beside the horse and says to us: "Give him some numbers and he'll add for you."

We give numbers at random and the owner sets them down in three columns of three numbers each, and commands: "Black Bear, add these."

The pony gives one brief glance at the board and at once takes from the fence the tin numbers: one, six, three, eight. We add hastily and get the total too:

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1638, arrived at instantly by Black Bear. At the owner's suggestion we give him numbers to subtract, and he does it with the same accuracy.

One of the party abruptly asks: "Black Bear, do you *know* that you are a pony?" This he does not get. Someone amends the question:

"Black Bear, were you ever in another body?"

Again the quick nod, and at our amused "Whose body?" the little horse seems to find his own amusement. He picks off the letters for "King Solomon."

"When did King Solomon live?" Rapidly, with no spacings, he spells out:

"B.C. Long time ago."

The owner brings a small clock and says: "Tell them what time it is."

The pony glances at the clock and selects his figures: "Three twenty-eight."

"What was the date of the Declaration of Independence?"

"July 4, 1775"—Black Bear's only inaccuracy!

"Black Bear, walk around and kiss the lady in the blue hat," says the owner. Black Bear moves outside the rail, walks straight to her of the blue hat, and kisses her.

"Now," says the owner, "one of you stretch out your two hands and tell him what finger you want him to touch."

One of the party extends his hands, another directs: "Touch the third finger of the right hand."

The owner interposes: "The middle finger"—which was not the finger intended by the one making the designation; and Black Bear touches the right third finger, disregarding his owner's erroneous suggestion.

I asked Black Bear's owner if he had

heard of the Elberfield horses which, according to Maeterlinck, could originate observations; and when the man answered yes, I added: "You have never tried this little horse with square root and cube root?"

"Oh, yes," he said. "Black Bear knows the whole thing."

We began: the square root of 25, of 36, of 49 we asked, and there was not a second's interval before, in every case, the correct number was selected. The cube-root replies were as prompt.

Once, in spelling out a reply, the pony hesitated and turned toward his owner. We watched intently, ready to suspect some instruction not delivered on time. Then we saw that, instead of hanging the tin letters in place as fast as the pony had removed them, the owner had collected three or four in his hand, and it was one of these which Black Bear needed for his word.

"Black Bear," says his owner, "was only three days old when his mother was sold away from him. He went about the streets, begging for scraps. Then the children began riding him—and he was so little. So I bought him. After a while I noticed that he could recognize numbers. Then I began to train him, and I found what he could do."

"Do you think other horses could be trained like this?" we asked.

"Any horse! Any horse!" he answered emphatically.

Black Bear has been exhibited occasionally in New York. They have had him at Columbia University. Some observers merely disbelieve. But there are those who wonder whether we know yet all there is to be known about animals.

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E. E. FREE (p. 257), a versatile writer on scientific subjects, has been associated with the Scientific American and The Forum. In 1915 Dr. Free proposed a theory of the physical structure of living matter which is now generally accepted. His researches in agricultural chemistry have been of great value.

WILL DURANT (p. 259) was once a reporter on the New York Evening Journal but found the pace too swift for his philosophic mind, so he turned to teaching Latin, Greek, French and English at Seton Hall College. Dr. Durant took up graduate work in philosophy, biology and psychology at Columbia, receiving his degree in 1917. Four years later he was made director of Labor Temple School. Then came his "Story of Philosophy," and his retirement from Labor Temple.

WALTER LIPPMAN (p. 261) is the author of "A Preface to Politics," "Public Opinion," "The Phantom Public," etc.; he was for several years an editor of The New Republic, and was later in charge of the editorial page of the New York World.

JESSE RAINSFORD SPRAGUE (p. 265), after many years of experience in retail business in Newport News and San Antonio, settled down in New York to write about business. In a series of recent articles in Harpers Magazine he has drawn attention to many of the absurdities and exaggerations of American business methods.

DONALD F. ROSE (p. 267) at the age of 17 secretly sent a 200-word essay which proved successful in a competition conducted by a literary magazine in England. At the present time he is weekly columnist and editorial writer, literary reviewer and after-dinner speaker both hither and yon.

WILLIAM G. SHEPHERD (p. 269) has probably had more experience as a war correspondent than any other American journalist. In recent years, he has been writing special feature articles for Collier's.

ROLAND G. E. ULLMAN (p. 275) is an advertising man and a Quaker, living in Pennsylvania.

JOSEPH COLLINS, M.D. (p. 277), the distinguished neurologist, has recently given most of his time to writing. He is the author not only of several medical volumes but of "The Doctor Looks at Literature," "The Doctor Looks at Love and Life," and other popular books.

ROBERT F. SISK (p. 285) was a reporter on the Baltimore Sun for three years and on Variety for the same length of time. He is now connected with the Theater Guild.

WILLIAM F. JONES (p. 287) is an economic geologist and petroleum engineer who describes those picturesque and significant incidents in the daily life of Latin America that our solemn experts who hold forth on "Yankee Imperialism" and "Manifest Destiny" blandly ignore.

WILLIAM T. ELLIS (p. 291) is a well-known editor and writer. He is an authority on post-war conditions in the Near East, and this story of the "V" secretary who acted like an admiral came from direct knowledge. Dr. Ellis is the author of a recent book, "Bible Lands Today," and the head of the Ellis Syndicate.

JESSE LYNCH WILLIAMS (p. 299) was one of the playwrights who lectured at the University of Pennsylvania this year. His play "Why Marry?" was awarded the Pulitzer Prize in 1917. He was president of the Author's League in 1921 and fellow in the creative arts at the University of Michigan, 1925-26.

H. H. SAWYER (p. 303) is a judge of the Municipal Court at Des Moines. He was educated at Morningside College, Sioux City, and practised law for 12 years.

HON. JAMES A. FREAR (p. 309) is Representative in Congress from Wisconsin.

H. L. SHAPIRO (p. 313) is Assistant Curator of Physical Anthropology, American Museum of Natural History.

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